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THE

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ORIGINAL LECTURES.

CLINICAL LECTURES ON THE DISEASES OF WOMEN.

By J. Y. SIMPSON, M.D. F.R.S.E.

Professor of Medicine and Midwifery in the University of Edinburgh.

LECTURE XXXV.

ON SUB-INVOLUTION OF THE UTERUS AFTER DELIVERY.

GENTLEMEN,—I have seen this morning a case of a peculiar form of uterine hypertrophy, to which I beg you will allow me to take this opportunity of directing your attention. The patient in this instance is a lady from America, who has suffered from disordered menstruation, and a feeling of weight and great discomfort in the pelvis, since the birth of her last child. She has, in short, most of the rational symptoms of a fibroid tumour of the uterus; but, on making a physical examination, I found there was no bruit over the uterus, while that organ was equably enlarged to about the size of a uterus in the third month of pregnancy, and readily admitted a sound to the extent of three and a-half or four inches into its interior. Now, although I am not aware that any of the older authors have pointed out particularly this peculiar form of uterine enlargement, yet I am sure it is not at all uncommon. There are at present in our ward in the Hospital two patients who are the subjects of this disease, and in both of whom the hypertrophy of the uterus is complicated, as it not unfrequently is, with retroversion of the organ. Let me read to you the history of these two cases as they have been briefly drawn up by the Clinical Clerk, Mr. Gooding:—

Case 1.—Margaret R., aged 22, married, was admitted on October 19, 1860. Five months after the patient's marriage, which took place in March, 1856, she had a miscarriage; the child lived three hours. Six months and a half after this she was again prematurely delivered of a child, which survived its birth only a quarter of an hour; both of these miscarriages she attributes to over-exertion. She again became pregnant, and experienced, at about the same time the previous miscarriages had occurred, symptoms threatening the loss of the fœtus. She was attended by a Medical man, who enforced rest. After remaining in bed three weeks, these symptoms passed off; and in May, 1859, she was delivered at the full time, after an easy labour, of a male child, which, however, only lived sixteen days. The lochia ceased in three days, but was followed by a yellow discharge, from the continuance of which, and the existence of disagreeable sensations in the epigastrium, and general debility, she applied to Dr. A. R. Simpson, under whose treatment she regained her health, and continued in good health till March, and in April last she was again seen by Dr. Simpson, who found her pregnant; with ulceration of the os and retroversion of the uterus. Two months after, she lost another fœtus, at about the sixth and a-half month of gestation. In two weeks she menstruated. In consequence of her feeble state of health, she went into the country; during her stay there she menstruated profusely for nine days. Only once since this, about ten weeks ago, she menstruated one day.

State on Admission.—The patient was very weak and nervous. She complains of occasional pains about the chest, and has a slight cough. She also complains of weight and uneasiness in the pelvis, with a feeling of bearing down at "the back passage." There is frequent desire to go to stool, and a feeling of something being left after rising. At times there is a yellow discharge from the rectum. Micturition is more often performed than usual. The uterus is much enlarged and retroverted, pressing on the rectum, and lying low in the pelvis. The os is directed anteriorly, and the uterine sound enters easily for more than three inches.

I need not trouble you with any further detailed account of her treatment, and of her progress during her residence in the Hospital, but I shall content myself with merely stating that the condition of the womb has undergone a marked change for the better, for it has become reduced to the normal size; and although still retroverted to some extent, yet it has become so far righted in its position, that the patient experiences no discomfort so long as she wears a vaginal pessary, of the peculiar form that I shall afterwards have occasion to describe to you.

Case 2.—Agnes R., aged 27, married, was admitted on November 20, into the Royal Infirmary. The patient states that since her marriage, which took place six years ago, she has had two children, and one abortion, which occurred eighteen months ago, at the second month of gestation. She has not been pregnant since that time. She had enjoyed good health previous to the occurrence of the abortion; on the fifth day after which she had rigors, and in a day or two pain in the hypogastric region, and in the back and loins. On the eighth day, when she arose from bed, she found she could not walk without great difficulty, and when seated could rise only with great suffering. In a short time the severity of these symptoms abated, but ever since she has experienced similar pains in a less degree. The menstrual function is regularly performed. In the intervals between menstruation there is a slight leucorrhœa. She has for a long time been obliged to pass her water much more frequently than before. There is a slight amount of pain when at stool, otherwise the bowels are unaffected. The uterus is retroverted and considerably enlarged; the uterine sound passing only with the point directed backwards towards the promontory of the sacrum, and entering at once to an extent of nearly three inches.

Both of these patients, then, are suffering from enlargement of the womb, consequent on an arrest of the retrograde metamorphosis that normally occurs in that organ after parturition. I have, I repeat, seen many cases where this form of uterine hypertrophy existed to a greater or less extent, and I assure you, you will find the subject of sufficient scientific interest, and sufficient practical importance, to demand for it your most careful study and attention. Let me tell you briefly what is

THE PATHOLOGICAL NATURE OF THE DISEASE.

After parturition, as you are aware, the greatly enlarged uterus begins regularly to involve or absorb, and rapidly diminishes in size, till it has been reduced almost to its pristine dimensions. I have had occasion, in another department of our course, to call your attention to the wonderful changes that go on in the uterus in consequence of impregnation, and to tell you how, from being a small body, two or three inches long, it comes, in the short space of nine months, to attain the length of a foot or more, while it is correspondingly enlarged in all its other dimensions and diameters. And I may here repeat the conviction that I then expressed, that if ever the laws of nutrition are to be clearly made out, the inquiry will probably be most successfully pursued by investigating these laws as they are seen in operation on a large and gigantic scale in this very organ; for in no other organ, so far as I remember, do we ever see nutrition and growth going on so rapidly as here, where out of a mere mass of nucleated fibres and cells an enormous body of numerous and well-marked muscular fibres become developed within the course of the nine months of pregnancy. Hardly less wonderful than this great development of the uterine walls during the progress of gestation, is the still more sudden diminution that occurs in these walls after parturition has been completed. The muscular fibres—perhaps weakened and exhausted as a result of their violent action during the parturient process, and so rendered prone to degenerate—and deprived also to some degree, of the supply of blood brought to them so profusely during the time that the uterine circulation was so much exaggerated, now undergo, after parturition, a fatty metamorphosis, in consequence of which they almost all melt down and disappear; so that in the brief space of five or six weeks the whole organ

FIG. 1.

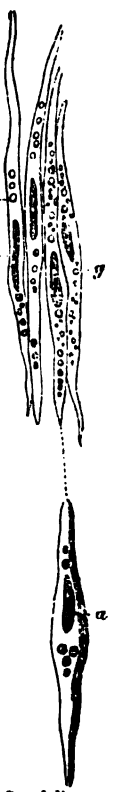

FIG. 1.—Muscular fibre-cells of the uterus three weeks after delivery; four of them treated with acetic acid and pale. *a*, Their nuclei; *g*, fatty particles in them. Magnified 35. (Kölliker.)

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dwindles down, and diminishes to nearly its original dimensions. The muscular walls of the uterus are not absorbed as muscle, but, like many other effete structures, they first undergo fatty degeneration, and are absorbed as fat. This fatty degeneration commences on the inner layers of the walls, and passes from them to the outer layers. The fatty metamorphosis of the uterine muscular fibres appears under the microscope, a few days after delivery, as a series of glistening particles deposited in the course of each individual fibre. Now the patients, with whose cases I introduced my present observations, are suffering from this curious condition of the uterus, that after the birth of their last children, this retrograde metamorphosis of the uterus has not taken place during the puerperal month, or, rather let me say, has taken place only to such an imperfect degree that the uterus is of the size we usually see it have at the end of the first week or so after delivery. They are suffering, then, from a hypertrophy of the uterus which is pathological in its permanency, but which results from a hypertrophy purely physiological in its origin.

Its Ætiology.

What, you will be ready to ask, is the cause of this enlargement of the uterus remaining permanently? How is it that the retrograde changes in the uterus become arrested and the absorption or involution of its walls is prevented? To these questions it would be difficult, or indeed impossible, with our present limited knowledge of the processes of development and degeneration that go on in the uterus, to furnish a satisfactory reply; but let me point out to you some causes which occasionally appear to lead to the production of this hypertrophy from arrested involution of the uterus.

1. *Rising too soon after Confinement.*—We know that both in the healthy and in the morbid state the uterus is apt to become more congested when the patient assumes the erect position, and that a morbid degree of congestion interferes with various physiological functions. And we can easily imagine that if a delicate woman gets up too soon after her delivery, and remains for a lengthened period erect, while the womb is still more than usually large, the circulation in its walls might get so impeded, and such an amount of congestion be produced, as would prevent the normal changes in its walls, and impede the free absorption of its disintegrated particles.

2. *Repeated Miscarriages.*—However it may be, we know, further, that in a number of cases an enlarged condition of the uterus of the same nature as that of which I am speaking, results from the frequent and rapid recurrence of a series of miscarriages or abortions in the same patient. You are aware that a woman who has once aborted is extremely liable again to abort at the same period whenever she again becomes pregnant. In such cases it is, moreover, remarkable that the patient often conceives again in a very short time after the occurrence of the abortion; and when this process has been several times repeated—the uterus undergoing the enlargement of a new pregnancy, before it has had time, as it were, to recover perfectly from the hypertrophy of a preceding one, the case sometimes ends in a complete disturbance of the normal physiological process of degeneration and diminution in the uterine walls; and the womb is left in a permanently hypertrophied condition.

3. *Metritis.*—Again, if you inquire minutely into the history of patients affected with this form of disease, and ask them particularly as to whether anything has gone wrong with them in their puerperal state, you will very frequently find, as in the case of the second of our Hospital patients, that within a short time after their confinement they have been the subject of an attack of inflammation in the uterus or ovaries, or neighbouring pelvic organs. They will, perhaps, tell you that a week or two after their child was born they had a shivering, followed by pain in the region of the womb and more or less fever, which compelled them to remain in bed for some time. It would appear as if the occurrence of metritis, or perimetritis, in the puerperal female, exerted such an influence on the substance of the uterus as to prevent the occurrence of those changes that lead normally to its diminution in size.

Its Semeiology.

The patient whom I have imagined you to be questioning as to the history of her malady, will probably tell you, further, that, after she had recovered so far from her inflammatory attack, and from the consequences of the bleeding and blistering to which she had been subjected for its cure, as to be able to walk about again, she began to be conscious of a feeling of discomfort in the lower part of the abdomen, to which she had never before been accustomed. There is frequently a sense of weight or bearing down of the uterus, of distress in the lower bowel, and of uneasiness in connexion with the action of the bladder, and a weakness, sometimes amounting to actual pain, in the lower part of the back, and, in some cases, a numbness of the lower limbs, which are all new to the patient. She attributes, most likely, these feelings to weakness, and expects that as she gains more strength the uneasy sensations will disappear. But some months may elapse, and she begins to be disappointed at her never getting entirely relieved of this local trouble; and after lactation is accomplished, if, indeed, she have been able to nurse her child at all, she finds that her menses do not return regularly, or become too profuse and painful. Leucorrhœa, too, is sometimes present to a greater or less extent; and altogether the patient is in a state of confirmed and anomalous bad health that is difficult of endurance. By means, perchance, of tonics and sedatives she strives to regain her health and alleviate her uneasiness, and continues for a time to hope that her former strength will still return, and that her ailments will disappear. Gradually, however, the conviction becomes forced upon her that something besides time will be needful for her cure, and that some kind of Medical treatment is required for her relief. Accordingly she comes to you, and when you have heard a history such as that I have endeavoured to narrate, you come to the conclusion that she is labouring under some disease of the uterus. But what the precise nature of that disease is you will not be able to fix and determine by studying the mere history of the symptoms. To make out a correct differential diagnosis, you must institute an examination of the uterus.

Its Physical Diagnosis.

On placing the hand over the abdomen, you can usually feel the enlarged uterus rising in the form of a tumour out of the pelvic cavity, and lying above the pubes, more especially in those cases where the hypertrophy is very considerable. In all cases you can discover, on making an examination per vaginam, that the vaginal portion of the cervix uteri is enlarged,—for this is a form of hypertrophy in which every part of the organ is implicated; and you find the whole uterus to be unusually large and heavy. This kind of local examination is, in the majority of cases, most satisfactorily carried out when the patient is laid on her back; sometimes it is more convenient to have her placed somewhat laterally. But in every instance of this kind you must bear in mind the importance of making an examination with *both* hands simultaneously,—the forefinger of one hand being employed to explore the uterus through the vagina, while the fingers of the other are applied to the fundus through the medium of the anterior abdominal wall. There is, perhaps, no variety of uterine disease in the diagnosis of which this sort of examination can be employed to more purpose than in the case of simple enlargement of the organ. In a few patients the abdominal walls are too thick to admit of your feeling anything very distinctly on palpation; and there are others, still fewer in number, in whom a certain degree of uneasiness renders the necessary pressure painful to the patient. When you have thus got the uterus between the two hands, you can easily recognise the existence of the hypertrophy, and even determine the degree to which it has taken place. You can feel that the swelling is not due to the presence of fibroid masses in the walls of the uterus, for there is no irregularity and no peculiarity in its shape. It has unmistakeably the shape and contour of the healthy organ; it is only that organ in a state of equable hypertrophy. Such a condition of matters might still, however, possibly be due to the presence of a fibroid tumour growing from the submucous layers of the uterine wall, and projecting into its interior; and to make sure that there is no such tumour present, you must have recourse to another simple means of exploration, viz., the introduction of a uterine sound. The cavity of the healthy uterus measures usually, as you know, about two and a-half inches in length; and when the sound is

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introduced, you find its point is arrested at the fundus, when the knob placed on the convex side of the instrument, at two and a-half inches from the extremity, has reached the level of the external orifice of the uterus. Where the organ is enlarged, however, the knob I speak of slips past the guiding finger, and the instrument runs up into the interior to a depth of three or more inches; and when the enlargement of the uterus is of the kind I have been describing as dependent on defective involution of the organ after delivery or miscarriage, the instrument usually slips in at once without the slightest difficulty, for the uterine orifice and canal is preternaturally patent. When, on the other hand, the enlargement is due to the presence of a tumour in the cavity of the uterus, the point of the exploring instrument usually meets an obstruction immediately on traversing the canal of the cervix, and it may require, in such a case, the exercise of some skill and a little gentle manipulation in order to pass it into the interior of the uterus at all. Besides, after the sound has been fully introduced, you can often feel with it the projecting body; while in the case of the simply hypertrophied organ the sound passes freely and unobstructedly round in all directions. If with the sound thus introduced into its interior you raise the uterus towards the hand placed over the abdomen, you will be able to make out more distinctly and definitely than ever the real nature of the case. There is one difficulty in connexion with the use of the sound in such cases, of which I ought, perhaps, to warn you, and it is this: The great weight of the fundus of the uterus, sometimes aided by inflammatory adhesions, gives a strong tendency to various displacements of the organ, and more particularly to retroflexion of it. Such a complication you must, accordingly, be prepared to expect; and in passing the sound you must then remember to turn it with the point and concavity looking backwards towards the sacral promontory. It was not long after I had begun to make use of the sound in the diagnosis of uterine diseases and disorders, that I first fell in with and recognised a case of sub-involution of the uterus. The patient, whom I saw in consultation along with the late Dr. Abercrombie, was the wife of a Medical gentleman, and there was much perplexity as to the nature of her disease. There was a large, rounded tumour laying over into the right iliac region, which was thought to be possibly either an inflamed ovarian tumour, or an abscess, as there was considerable pain on pressure On passing a sound, however, it was found to run right up at once about four inches into the very centre and top of the tumour. The supposed tumour was thus shown to be neither more nor less than the uterus considerably enlarged and turned somewhat to one side, as sometimes happens in such cases. That was the first occasion, so far as I know, in which this kind of uterine hypertrophy was clearly made out; but since then I have seen it very frequently, usually as a result of inflammation after delivery, but sometimes associated with repeated miscarriages in the relation both of cause and effect.

Its Duration and Degree.

In some cases you will detect the form of uterine hypertrophy which I am describing, within two or three weeks, or two or three months after delivery. These may be called the acute, or subacute, types of the disease. But oftener perhaps in practice, you will not be applied to till the disease is chronic,—till many months, or even years, have elapsed since the date of the last delivery, or of the last abortion, which left the uterus in the sub-involved or unreduced condition which we are considering. The degree or amount of remaining enlargement varies infinitely in different cases; and is, perhaps, mainly regulated by the date of the confinement at which the arrest of the uterine involution takes place, and the completeness or not of that arrestment. I have seen instances where the uterus was large enough to be felt some inches above the pubis, and where the uterine sound passed into the uterine cavity to the extent of four or five inches. In other examples you will find the uterus in form and length remaining hypertrophied only to a slight extent, and the sound passing perhaps not more than two and three-fourths of an inch or three inches. Between these two extremes, you will meet in practice with all intermediate degrees of this permanence of the puerperal hypertrophy of the uterus.

Fig. 2.

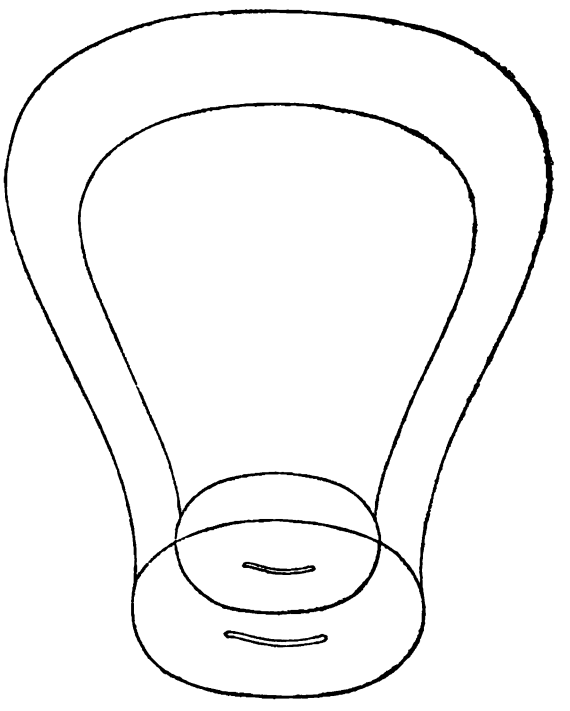

Fig. 2.—Sketches in outline of the uterus in its normal and in its hypertrophied conditions.

Treatment of the Disease.

In the more acute forms of the disease, I have almost invariably found that by the immediate employment of local antiphlogistics the symptoms were speedily and successfully alleviated, and the process of absorption was set up. Where any traces of inflammation still remain, the importance of this indication is at once apparent, and its fulfilment is in most cases attended with rapid relief. But even in cases where all inflammatory action seems to have died out, and only its results remain, we often find—I cannot well tell you how—that a local antiphlogistic course of treatment has the effect of setting up absorption in the enlarged organ, and leading ultimately to its restoration to its normal state. In following out this line of treatment, then, you will do well—if the patient is not very weak and debilitated—to begin with the application of eight or a dozen leeches to the vaginal portion of the uterus, or simply to the perinæum, or circle of the anus. I need hardly repeat, that the abstraction of a small quantity of blood in this way will be more particularly called for, and more especially beneficial in those cases where there lingers any degree of congestion or of inflammatory action in the uterus. But even in such acute or subacute cases, and in all the more chronic forms, your chief reliance must be placed on the use of counter-irritants applied externally to the surface of the abdomen or sacrum. You may use antimonial or croton ointments, or paint the hypogastric surface twice a-day with strong tincture of iodine till the skin becomes tender; but the vesicant which I have found to be most efficacious in exciting the function of absorption in the womb that is now in abeyance, is the ordinary cantharides-blister, especially in the chronic forms of the disease, and when the bladder is not liable to be irritated. You may order a series of small blistering-plasters to be applied for a time over the lower part of the abdomen, or you may paint a succession of small spots—one every second or third day, with blistering liquid until the uterus begins distinctly to diminish in size. I think you will find the latter mode of applying the vesicant to be the simplest and the most certain. The plan I usually follow is to apply the fluid to a patch of about the size of a crown, and then gradually to surround this patch with a number of others of like diameter, one being added every third or fourth day,

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until the original central point has been surrounded by a ring of five or six distinct blistered spots. At the same time that you are thus trying to excite absorption by the application of counter-irritants to the cutaneous surface, you must endeavour to promote this object by keeping the vaginal portion of the cervix uteri immersed constantly in ointments of mercury or iodide of lead, or bromide of potassium, or other remedies likely to have the effect of stimulating the absorptive process. This you can do by introducing, or making the patient herself introduce, into the vagina one or two pessaries medicated with these substances every night and morning.

But you will find that these local measures are not always, or in most cases, sufficient to effect a cure. You will be obliged to have recourse also to the internal administration of some of the class of deobstruent remedies; and, of these, the most efficacious are the iodide and bromide of potassium. I used, at one time, to rely chiefly on the administration of the iodide of potassium. But of late I have employed the bromide much more extensively, for it has this advantage over the former salt, that its use may be kept up for almost any length of time by a patient without her becoming subject to the kind of marasmus which we sometimes find attendant on the prolonged use of the iodide. The bromide of potassium may not only be given with safety for a lengthened period, but it may be administered with confidence as a good tonic, as well as perhaps the best deobstruent in the Pharmacopœia. It may be depended upon as an active stimulant to absorption, besides possessing the property, beyond all other remedies that I know of, of acting as a special sedative on the reproductive organs. In cases of this kind you must administer it in larger doses than usual, making the patient take six, eight or ten grains of it three times a-day. Sometimes patients suffering from this form of uterine hypertrophy present themselves to you in a debilitated and anæmic condition. Under such circumstances, you need not hesitate to add iron, managnese, or some form of metallic tonic, alone or in combination, to the more specific remedies, and endeavour, always in the more chronic cases of the disease, by means of good diet and other hygienic means, to raise the patient's general standard of health.

You will occasionally meet with cases of this disease so obstinate, that the process of absorption does not begin, or does not go on to any satisfactory degree, even after you have had recourse to repeated leechings, and have kept the uterus imbedded for a length of time in discutient ointments, and have duly administered all kinds of deobstruents and tonics. In such cases you may follow up the course of treatment which I have sketched for a very lengthened period without producing any appreciable change in the size of the womb, or any marked alleviation of the patient's symptoms. If, however, by any means you can induce the uterus for a time to take on an action of increased growth, you may confidently hope that this temporary hypertrophy will be followed by a process of absorption which will go on, perhaps uninterruptedly, until the organ is reduced to its normal dimensions. Such a transient increase in the size of the uterus you may at any time produce by taking advantage of the physiological tendency of this organ to enlarge and become developed around any foreign body that happens to be lodged within it. You know that the uterus begins to enlarge when stimulated by the presence of an ovum, or of a fibroid tumour, or of a clot of blood in its interior; and in like manner it becomes developed in size when a foreign body, such as a sponge-tent or an intra-uterine bougie, is introduced artificially. By introducing, then, a succession of very small sponge-tents into the interior of the womb, or by making the patient wear for a time an intra-uterine pessary, you can cause the uterus to take on this hypertrophic action; and by afterwards actively and fully taking advantage of the tendency of the organ to undergo a process of degeneration and diminution on the removal of the stimulus, you may succeed, by the due employment of the various discutients and deobstruents I have already mentioned,—as rest, counter-irritation, and bromine,—in promoting the process of absorption to such a degree that the uterus at last becomes reduced to the natural standard. In some obstinate instances I have been obliged to repeat from time to time this process of artificial irritation and dilatation before a perfect cure was effected.

LECTURES
ON
THE SPINAL CORD,
DELIVERED AT
The College of France,
DURING THE SUMMER SESSION 1860,
By M. CLAUDE BERNARD,
Member of the French Institute; Professor of General Physiology at the Faculty of Sciences, &c.

LECTURE I.
ON THE GENERAL PROPERTIES OF THE NERVOUS SYSTEM.

Summary: Introductory Remarks — Plan of this Course — Influence exerted by the Nervous System over all Vital Phenomena—Its Importance increases in Proportion to the Animal's Elevation in the Scale of Life—Division of Nervous Pairs into Sensitive and Motor Branches—Insufficiency of this Distinction in the present State of Science—The Physiological Properties of the Living Tissues, before entirely disappearing, undergo a Variety of successive Changes, which it is highly interesting to examine—The Action of Disease modifies our Organs in a gradual, not in an abrupt, Manner—The total Extirpation or sudden Mutilation of certain Organs is, therefore, far from giving a correct Idea of the Morbid Process—Modifications of Sensibility adduced as an Instance—Effects observed in recent Wounds—The Distinction between Sensible and Insensible Tissues unfounded; there exists only a Difference in the Degree of Excitability which they respectively possess—The Exaggeration or Diminution of Sensibility always due, however, to the Action of the Posterior Spinal Roots—Various Methods of Accounting for these Oscillations—Augmentation of the number of Nerve-Tubes, or of their Intrinsic Properties—Various Instances of this latter Fact adduced—Pneumogastric Nerves Insensible in Fasting Animals, but highly excitable during the Process of Digestion—Modifications in the Properties of a Nerve usually due to Changes which occur at their Extremities within the Depth of the Tissues to which they spread—The Different Properties of the Corda Tympani, and Motor Nerve of the Parotid Gland, adduced as an Example of this—Effects produced by Sections of the Sympathetic Nerve—Scalding and Blistering likewise augment the Excitability of the Nerves, which spread to the affected Parts—The Increased Vascular Action which takes place in certain Regions, under given Circumstances, is, therefore, one of the leading Causes which modify their sensitive Properties—The Genital Organs offer a striking Example of this—We must not, therefore, rest satisfied with merely verifying the Existence of certain Properties; the Degree of Intensity which they exhibit must also be ascertained—There exists, however, no absolute Standard in Physiology—The Properties of an Organ must always be viewed in Connexion with those of neighbouring Parts—Sensation, for instance, is always expressed by Motion—Utility of the Cardiometer in Difficult Cases—Applications to Practice.

Gentlemen,—After having mastered the general principles which must guide the physiologist in the path which modern Science has opened before him, you are at length fully prepared to enter into the subject itself, and view the question in its practical bearings.

Our plan consists, as you are aware, in successively examining each of the systems which form a part of the economy, with reference to the various affections, of which they frequently become the seat. The immensity of our scheme excludes of course all possibility of a complete analysis: to fill up so vast an outline is beyond our power, and we do not pretend to discuss the problem in its widest sense. A similar attempt, if not presumptuous, would at least be premature. For, as we have laboured to prove in the former part of this Course, Experimental Pathology must, in every case, be grafted upon a previously-acquired knowledge of the physiological state; and, in endeavouring to elucidate the process which takes place in a diseased animal, we must never lose sight of the healthy condition. Our researches must, in consequence, be confined to a few given points, and cannot be prosecuted with any rational hope of success, in the case of organs, the physiology of which remains in doubt; in other words, the laws which control the regular manifestations of life must have been ascertained, before their morbid deviations can become a proper object of inquiry. Without attempting, therefore, to explore in its full extent the spacious field of scientific nosology, we shall rest satisfied with examining a limited number of questions, and hold ourselves fortunate if it falls to our lot to collect some few materials for the gigantic edifice, which can only be reared by the persevering efforts of successive generations.

The following method is that which, after mature reflection, appears best calculated to answer our present purpose. We shall in future combine our lessons on Experimental Pathology and Operative Physiology in a single series of lectures; for although the scientific result in the pursuit of

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which we are engaged is closely connected with the higher regions of Medical Philosophy, we cannot think of omitting, in this Course, the Surgical directions which are of such vital importance to all practical observers. In intellectual pursuits, as well as in manual trades, a familiar acquaintance with the use of our tools is one of the chief elements of success; and since the chemist and natural philosopher are at all times prepared to repeat the experiments connected with their own peculiar branch of science, a considerable degree of skill in performing operations on the living subject is evidently indispensable to the physiologist.

The properties of the spinal cord have been selected in preference to other subjects, as an introduction to our future studies; for as the order adopted in reviewing the various functions of the economy is entirely a matter of choice, we have thought proper to assign the first place to the phenomena of nervous action, which play so prominent a part in health and disease. Without further prelude, therefore, we will now pass to this subject, laying down as we proceed the rules for performing the principal experiments which lead to the knowledge of the normal powers, and morbid influence of the nervous system; the question will, in this manner, be viewed at once in its physiological and pathological aspect. A thorough acquaintance with all these points can alone enable the Physician to trace back the successive steps by which any given morbid series progressively arrives at its complete evolution; for as long as the prime motor remains concealed, the true relation between the symptoms observed, and the causes which produce them, will, in almost every instance, escape us.

The predominating influence of the nervous system over the remaining parts of the economy is directly proportionate, in the case of each animal, to its degree of elevation in the scale of life; so that in man and the higher mammalia, the nervous element becomes in reality the primitive source of all vital phenomena. But this great apparatus is itself subdivided into various secondary systems; and, in this respect, one of the most important acquisitions of modern physiology is due to the labours of Bell and Magendie; we allude to the division of nerves into sensitive and motor branches. But this initial discovery, however valuable, does not fully meet the actual demands of science; for both physiology and pathology, but more especially the latter, imperatively require a farther extension of our knowledge on this point.

The question, however, has been almost exclusively viewed in this light by modern observers. When, after dividing a given pair of nerves, sensibility was found to disappear in the corresponding parts, the divided pair was set down at once as belonging to the sensitive apparatus; and it was classed on the contrary among the motor branches, if voluntary motion was suppressed in consequence of the operation. The functions of the spinal pairs having thus been determined, the experiment was repeated on the cranial nerves; and, lastly, the brain itself was subjected to a similar process of analysis, its constituent parts being successively examined, with reference to the powers of sensation and volition; in short, it was taken for granted that our acquaintance with the properties of the nevous system would be altogether complete, as soon as it became possible to distinguish, with perfect accuracy, the sensitive from the motor fibres in all parts of the body. The absolute insufficiency of such a method of investigation is too evident to require a proof; for between the normal existence of a vital function and its total disappearance, a variety of intermediate conditions arise, the knowledge of which is no less interesting to the Physician than to the physiologist; in fact, the entire destruction of our organs under the influence of disease never takes place at once; the process of disorganisation advances by degrees, and the fatal event is the last consequence of a long and protracted series of progressive alterations How, therefore, can we expect to imitate the effects of disease by suddenly removing an organ from the body, or destroying its properties at a single blow? The ultimate results derived from the action of morbid causes ought not, of course, to be neglected in our studies; but the gradual changes which precede the final dissolution of the injured apparatus equally deserve our attention, and must be carefully ascertained before we can flatter ourselves with having "taken Nature in the fact."

The nervous system, although chiefly designed to receive the impressions of external objects, and communicate them to the understanding, exerts at the same time a powerful influence over the internal modifications which take place within the living economy. The impressions produced upon the sensitive nerves, for instance, almost invariably give rise to motions of different kinds; such is more especially the case with respect to organic life. Now, the intensity of these internal motions, which so considerably varies according to circumstances, is evidently one of the principal agents concerned in the production of diseases; and the properties of the sensorial apparatus being hitherto (in a great measure) involved in doubt, it behoves us to enter more deeply into the question than has been done by our predecessors. If, for example, we give the name of Excitability to the characteristic faculty enjoyed by sensitive fibres,—namely, that of perceiving distinct impressions when placed in contact with external stimuli, how shall we succeed in explaining its singular and extensive variations in the sound as well as in the diseased subject? Do not the same agents frequently determine opposite impressions in different individuals? and is not the sensation often perceived in cases where no corresponding object exists? In a former part of this course, some of the changes which occur in nervous sensibility, under given conditions, have already been noticed: we have shown you that in recent wounds, an important alteration rapidly takes place in the nervous ramifications which spread to the part, when exposed to atmospheric action, and that, in consequence, less pain is experienced at the moment when the tissues are divided, than after a short space of time has elapsed. The discordant results obtained by physiologists in making experiments upon recurrent sensibility have been accounted for in this manner; it will of course easily be conceived, that nerves which immediately after being divided appear for a moment benumbed, may rapidly acquire so intense a degree of excitability, that the mere contact of foreign bodies becomes intolerably painful: and a similar explanation applies to the intense sufferings of certain patients, in affections of ligaments and tendons, fibrous membranes, and other parts usually viewed as insensible. The distinction established by Haller between those tissues which are endowed with sensibility and those which are not, has in consequence given rise to endless controversy; the results obtained by each individual observer depend, in fact, upon the particular conditions under which the experiment is performed.

It may, however, be laid down as a fundamental axiom, that in all cases in which an exaggerated amount of sensibility is exhibited, there exists a preternatural activity of the posterior roots of the spinal nerves; for, when these are divided, all sensations are at once abolished in the corresponding regions. But, in endeavouring to appreciate the nature of these phenomena, we labour under the same difficulties as in ascertaining the source of the vascular development, which so rapidly arises in organs affected with inflammation. In such cases, it is uncertain whether new capillaries have been, as it were, created on the spot; or whether minute vessels have been suddenly enlarged, so as to permit the free circulation of the blood in parts from which it was previously excluded. Now, the same question might be put to us with reference to nervous hyperæsthesia, and we should equally feel at a loss for an answer. Are we to suppose an additional number of nervous filaments to have been generated under the influence of the morbid process, or the physiological activity of the posterior roots to have been unusually excited? Both positions are equally capable of being supported by plausible arguments; for, on the one hand, the extremities of nervous trunks are provided with cells, from which new elements may be created; and, on the other, the sensibility of the posterior roots is liable to the most extensive variations, even in a perfect state of health: thus persons engaged in deep meditation are for the time being almost entirely deprived of peripheral sensibility, although the organic functions of life do not experience the slightest derangement,—a fact of which historical examples stand on record; at the same time, acute impressions, whether of pain or pleasure, are known to suppress for a while all other sensations, in strict conformity with that celebrated sentence of Hippocrates, "Duobus doloribus (a) simul abortis, vehementior obscurat alterum." But, to adduce a still more physiological example (if we may be allowed so to

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express ourselves), the properties of the pneumogastric nerve afford abundant proofs of the influence exerted by certain conditions of the body over nervous action. In most animals this voluminous trunk may be excited without giving pain, after a long fast; but the slightest irritation, during the digestive process, is attended with intense sufferings, which the animal expresses by plaintive cries and convulsive movements: now, in this case, no morbid transformation has evidently taken place.

It must, therefore, be acknowledged, that sensibility is subject to deep variations, even in the physiological state; and the importance of such changes will be easily understood if we remember the facility with which local disorders become general, through the channel of the sensitive apparatus; in a vast number of cases, the impulse which sets the contractile system in motion is derived from the impressions produced on the surface of the body. We find the motor nerve excitable, in a greater or lesser degree, in various organic conditions of the economy; now, the origin of such modifications is to be sought for, not in the centre, but at the circumference of the nervous system. In the instance we have just adduced, is the brain to be viewed as the source of the unusual sensibility of the pneumogastric nerve during the process of digestion? We are fully aware, on the contrary, that the condition of the mucous coat of the stomach, to which the terminal extremities of the nerve are distributed, is the only cause of so prodigious a difference; as long as it remains pale and flaccid, the nerve remains in a state of comparative indolence; but, when the contact of food has accelerated the circulation, and caused the inner surface of the gastric cavity to grow red and tumefied, a corresponding effect is produced upon the nervous trunk, which suddenly emerges from its previous torpor. The flow of blood to its extremities would, therefore, appear to be the vital stimulus which calls its slumbering powers into full activity.

The different degrees of excitability exhibited by various parts of the nervous system, under galvanic influence, are probably connected with similar conditions. An instance of this fact, which is, no doubt, still fresh in your recollections, is afforded by the corda tympani, as contrasted with the motor nerve of the parotid gland. When galvanism is made to act upon these nerves, a much more powerful current is required to produce the secretion of parotidian saliva, than in the case of the submaxillary gland; now, the peculiar excitability of the tympanic nerve evidently arises, not from any special disposition of its cerebral origin, but from the distribution of its terminal branches to a rich vascular tissue, which abundantly supplies the materials of secretion, and bestows additional sensibility upon the nervous element. In the same manner does the flow of blood to a part (whether occasioned by the legitimate demands of Nature, or produced under the influence of disease) act upon the corresponding nerves. When a branch of the sympathetic nerve has been divided, the vessels are paralyzed, and no longer oppose an active resistance to the pressure of the blood; so that the quantity of this fluid which passes in a given space of time through the affected part is notably increased. A simultaneous augmentation of temperature and sensibility is invariably found to be the result of the operation. The effects of inflammation must be viewed in the same light. If the sensibility of a cutaneous nerve is ascertained in the healthy state, by means of a graduated apparatus, it will be found that, after scalding or blistering the parts to which its ramifications are distributed, a considerable increase of its excitability has taken place; a galvanic current, which is scarcely felt on the opposite side, provokes instant pain when applied to the nervous trunk which spreads to the injured region. The properties of a nerve are, therefore, evidently modified by the state of the organs in the substance of which it terminates; our experiments upon the injection of sand into the capillaries, and the general disturbance which arises from the operation, afford an additional proof of this.

You perceive, gentlemen, that even in the physiological state, both sensitive and motor nerves are liable to extensive oscillations in the intensity of their action, from absolute dulness up to the most exquisite sensibility. But no precise limits can be assigned to the extent of these variations in the normal state: no visible barrier separates the field of physiology from that of pathology; there is a point in which the two opposite conditions meet, and cannot be distinguished from each other: we are thus no longer able to say, "This is health, and this is disease." If the irritation produced by Surgical lesions exaggerates the sensibility of the injured parts, the physiological activity of the ordinary functions of life produces a similar result, although in a different manner. The genital organs, in a state of rest, are not endowed with a higher degree of sensibility than the surrounding parts: but when placed in a state of erection, the slightest touch provokes those vivid sensations which certain naturalists have viewed as the result of a special sense.

To appreciate with scientific accuracy these interesting phenomena, is a matter of great difficulty; to ascertain their existence is not sufficient for our purpose: their different degrees of intensity must also be measured, as far as possible. Now, in physiology, the facts which come under one's notice cannot be abstractedly studied;—they must be viewed in connexion with each other. A nerve cannot exist by itself; its properties are inseparably linked with those of the surrounding parts. You therefore perceive that vital phenomena cannot be estimated with reference to an absolute standard; all we can possibly accomplish is to compare them with each other, without endeavouring to establish a definite proportion between them; and even this limited result cannot easily be attained to. Let us suppose, for instance, that we intend to produce a sensation of pain in an animal; in order to judge whether the intended effect has been produced, we must watch its movements and listen for its cries; and if the subject of the experiment remains entirely motionless, we are quite at a loss to say whether the attempt has been successful or not. In the case of man alone can direct information be obtained from the patient: thus in operating for cataract, Magendie was enabled to ascertain the total insensibility of the retina, when acted upon by ordinary stimuli; the impression of light alone is capable of acting upon the optic nerve; and the contraction of the pupilla by reflex action bears witness to the power of this agent.

But, as we have often stated, there exist certain animals which undergo without flinching the most painful operations: the shepherd's dog belongs to this class. What remains to be done in such cases? When the posterior spinal roots are acted upon, we find them to be endowed with sensibility in all kinds of animals; their cries and convulsive movements evince the acute pain which they feel; but were the subject to remain motionless, the existence of such a property in nerves could not possibly be demonstrated; in experiments, therefore, in which no pain is expressed by the animal, are we entitled to conclude that none is felt?

We have frequently employed to our full satisfaction, an ingenious method of ascertaining the fact, in such cases,—we allude to the cardiometer. This instrument, as you are aware, merely consists in a delicate manometer, which is adapted to some large artery (the common carotid in general), for the purpose of measuring the pressure of the blood, and the intensity of the heart's action; now the sensibility of this organ is such, that latent impressions (so to speak), or sensations which no outward sign betrays, are at once revealed by the sudden augmentation of its impulsive power, the well-known effects of moral emotion afford a trite instance of this. In our next lecture, you will see that a nerve after being laid bare, may be touched so lightly as not to provoke the least agitation; but the rapid ascension of the mercury contained in the tube of this instrument, immediately informs us of the impression produced upon the sensitive apparatus. On the other hand, when the posterior roots have been cut, all excitability being destroyed, the peripheral extremities of the divided nerves may be pinched, bruised, burnt, or otherwise acted upon, without altering the level of the mercurial column in the slightest degree; an implicit reliance may therefore be placed upon this valuable instrument, which frequently enlightens, but never misguides, the physiologist.

We shall, of course, employ a variety of stimuli for the purpose of awakening the dormant powers of the nervous system; and galvanism naturally occupies among these agents a prominent place; we possess, as you are aware, a graduated apparatus, which enables us to measure with great accuracy the intensity of the currents employed in our experiments; this method of operating will be found of the highest utility in comparative analysis.

In short, gentlemen, the following is the programme of our studies; we shall examine the chief properties of the nervous system, and perform in your presence the classical experiments with which you are already familiar; but the more

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verification of facts not being the actual purpose of our researches, we shall, after duly ascertaining their existence, measure the comparative intensity of nervous actions, and review their different shades; and, lastly, we shall seize upon every opportunity which offers of turning to account our physiological knowledge in practical applications. Such, gentlemen, is the final object which, in this Course, we have invariably kept in view.

ORIGINAL COMMUNICATIONS.

ON

PARASITIC AFFECTIONS OF THE SKIN.

By T. McCALL ANDERSON, M.D.

No. I.

GREAT as is the progress which of late years has been made in the improvement of our knowledge of most of the branches of Medicine, in none has this been manifested in a more marked and striking manner than in ascertaining the true nature and rational treatment of cutaneous affections. Our Continental brethren have, however, certainly outstripped us in this department of Medical Science. For this the reasons are abundantly obvious. In France and in Germany there is much more opportunity afforded to those desirous of devoting themselves to the study of a speciality, as is evinced in the formation of large Special Hospitals, and in the institution, by the different Continental Governments, of Professorships in connection with these Institutions. For, however much I may coincide in the opinion, that the science and art of Medicine, when split up into a great number of branches, do materially suffer, still I cannot help thinking that, by special attention to a few of the more important and least studied diseases, and by the formation of Hospitals for promoting that purpose, the extent of our knowledge is enlarged, and the public are thereby so much the gainers.

It is, unfortunately, an indisputable fact, that the study of cutaneous diseases is very much neglected in this country; and, although there are a good many Practitioners who are well acquainted with them, these are decidedly in the minority, and there can be no doubt that the great proportion of the Medical men in this country, though guided by broad general principles in the treatment of these affections, are yet very much in the dark with regard to the appearances and nature of all but a few of the commoner varieties; and every one knows that, without forming a correct diagnosis, general principles of treatment cannot successfully be put into practice. Besides, general principles do not form a sufficient guide to their treatment, for there are several internal, and many external remedies which form almost a special branch of therapeutics, and which require separate and attentive study.

The changes which of late years have been made in the basis of the classification of skin diseases in France, have led to improved knowledge and more skilful treatment. In England, the classification, adopted by Plenck, and modified by Willan, reigns at the present day either unchanged, or with only slight modifications. The arrangement, on the other hand, originated by Lorry, and extended and improved by Bazin and Hardy, founded, not upon the external appearances of the primitive lesions, as in the case of the English school, but on the causes, nature, and appropriate treatment of the various diseases, is destined, in future years, to be adopted everywhere,—the former guiding the eye in naming the affection, the latter directing the mind in ascertaining the appropriate therapeutical indications.

Without enlarging further for the present upon these points, I may state that, having adopted this latter basis of classification, I am enabled to form a distinct class of the parasitic affections of the skin. These may be conveniently divided into two classes:—

A. Cutaneous affections due to the presence of a *vegetable* parasite.

B. Cutaneous affections due to the presence of an *animal* parasite.

The cutaneous affections due to the presence of a vegetable parasite are four in number, viz:—

I.—Tinea tonsurans, of which there are three varieties, viz:—

1.—Herpes Circinatus. 2.—Sycosis. 3.—Herpes tonsurans.

II.—Favus.

III.—Alopecia Areata.

IV.—Pityriasis Versicolor.

Each of these four diseases I believe to be due to the presence of a distinct parasite, but (without entering into details at present), it may be stated that this is not the opinion of Hebra of Vienna, who believes that they are all produced by one and the same fungous growth, and that the various affections so produced, are owing to the quantity of the parasite deposited, to its stage of development, and to the particular structure of the skin attacked. He supports his statement by the fact, that he has seen Favus and Herpes tonsurans developed on the same individual, apparently from the same cause. But there is no reason why a patient may not be attacked by two fungous growths at the same time, and besides, such cases are decidedly rare. So that they may be considered as cases of coincidence and not as instances of two affections, owing to one and the same parasite. This is a subject, however, which has not yet been thoroughly investigated, and it is one, besides, of more scientific than practical value. I proceed now to the investigation of the different affections, and firstly, of

TINEA TONSURANS.

(Disease due to the presence of the Tricophyton.)

Tricophytie (Hardy), Teigne tonsurante (Bazin).

The name Tinea tonsurans is sometimes employed to denote the common ringworm of the scalp only; but, following Bazin's nomenclature, I include under this denomination, not only ringworm of the scalp (Herpes tonsurans), but also the other two varieties of the same parasitic disease, namely,—ringworm of the body (Herpes circinatus), and sycosis.

Why now, in opposition to the belief of the most celebrated dermatologists of this country, do I affirm that herpes circinatus, herpes tonsurans, and sycosis, are merely varieties of one disease, which we call tinea tonsurans? For two reasons simply:—

1. Most of those who have devoted themselves specially to the microscopic characters of the vegetable parasitic diseases, Robin, Bazin, Hardy, etc., agree in the opinion that these three affections are essentially parasitic in nature, and further, that the same parasite is found in each.

2. I have clinically confirmed what was first pointed out by Bazin, that these three affections are often met with in connexion with one another, and that one variety is capable of giving rise to another by contagion. I cannot conceive how dermatologists come to rank herpes circinatus along with herpes zoster, the only resemblance or connexion being in the name, which, derived from ἑρπειν, to creep, is admirably adapted to designate the circinate disease, attacking as it does at first one small spot, and gradually extending and involving large portions of the cutaneous surface in its course, but quite inapplicable to the zoster affection, and only tolerated from long custom. Herpes circinatus, as we shall see, is not generally a vesicular eruption; herpes zoster always exhibits large typical vesicles; the former is a parasitic affection,—no parasite has ever been discovered in the latter; the former assumes the circular form,—the latter never; the one is a comparatively chronic inflammation of various continuance when not treated, the other an acute inflammation running its course in a couple of weeks, and almost always accompanied by neuralgic pains, lasting an indefinite period. In fact, no two diseases can be more different; and this is just one of many instances of an improper nomenclature, leading to an erroneous classification and erroneous notions.

But, returning to the proofs of the identity of the three affections, herpes circinatus, herpes tonsuraus, and sycosis, let us first examine the microscopical appearances. In all three affections, in placing the excreted *débris* under the field of the microscope, after adding caustic potash to separate the epithelial scales, innumerable little rounded or oval globules or spores, about the 7000th of an inch in diameter, are distinguished. Many of these are isolated, others are united together into chains. Comparatively few cyptogamier tubes are to be seen. The sparing development, then, of

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tubes, and the enormous number of spores are characteristic of all three affections, and distinguish them from the vegetable structures found in other parasitic diseases (see Fig. 1). These statements are confirmed by the investigations

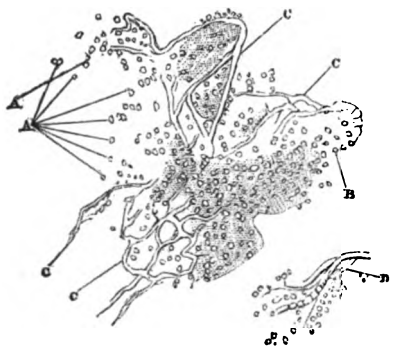

FIG. 1.—Fungous Growth from a case of Tinea tonsurans. A.A. Isolated spores. B. Spores united at their ends. C.C.C.C. Empty tubes. D. Sporular tube. (Bazin.)

of Robin, Bazin, Hardy, Deffis, and others, and the parasite which was discovered by Malmsten, in 1845, is denominated the tricophyton. The alteration of the hairs, and the disposition of the fungus in their interior will be treated of when I come to discuss herpes tonsurans and sycosis in detail.

But the clinical proofs of the identity in nature of all three varieties of tinea tonsurans are even more satisfactory; for it requires a first-rate microscope, great dexterity in the use of it, and considerable experience of parasitic affections, to demonstrate the existence of the fungus in an accurate manner, whereas the proofs derived at the bedside are patent to all who have an opportunity of witnessing them. In patients affected with herpes tonsurans (ringworm of head), patches of herpes circinatus (ringworm of body) are frequently seen on other parts of the skin, and more especially on the neck, in the neighbourhood of the herpes tonsurans. And what is more conclusive, is the fact that patches of herpes tonsurans sometimes extend from the scalp to the neck, in which case, the segments on the latter situation assume all the characters of herpes circinatus. In a very able paper on Tinea Tonsurans, by Dr. Jenner, in the *Medical Times and Gazette* (for November 28, 1857), it will be seen that he also has observed cases of this kind, and has also detected the parasite in the patches of herpes circinatus, as well as in herpes tonsurans; but on reading a little further, I am astonished to see that Dr. Jenner's conclusion is that herpes circinatus and herpes tonsurans are distinct diseases. I am very much mistaken, however, if those who read attentively Dr. Jenner's remarks, do not arrive at a conclusion exactly the opposite of his.

In cases of sycosis (say sycosis of the chin, for it is also met with on the Mons Veneris, upper lip, etc.) patches of herpes circinatus are extremely often met with on the neck, and, in many cases, segments of herpetic circles extend round the front of it from ear to ear below the beard. In sycosis also there is nothing more common than to find the external aspect or back of the wrist or hand the seat of herpes circinatus, owing to the patient rubbing the itchy and diseased portions of the chin with these parts, and thus causing the transmission of the parasite. And the reason why the right wrist is more frequently affected than the left is, that most people are right-handed, and, accordingly, use more frequently the right wrist in rubbing the itchy chin.

I have never had the opportunity of witnessing herpes tonsurans and sycosis on the same patient, but this is owing to the fact that the former almost invariably attacks children while the latter is necessarily confined to adults. Instances, however, have been noticed of grooms being attacked by herpes circinatus and sycosis, after grooming horses affected with herpes tonsurans. It is probable that in these cases the grooms first contracted herpes circinatus and afterwards sycosis; so that here we have cases of transition from one to the other of all three affections (a). Bazin thus reports a most interesting case of the communication of herpes circinatus from a horse affected with herpes tonsurans:—

"A dragoon came to the Dispensary of the St. Louis Hospital affected with herpes circinatus of the front of the right forearm; the skin of one of the patches was denuded of hair. He stated that five or six of his comrades had contracted this affection, as well as himself, from grooming diseased horses. We went to the barracks, where, sure enough, we saw three horses which exhibited rounded patches, absolutely identical with those of herpes tonsurans, on the withers, shoulders, back, and belly. The hairs in the centre of each patch were broken off close to the skin, and there was, as in herpes tonsurans, a whitish, squamous and even crust-like production which was traversed by the hairs. The presence of spores was detected with the microscope. The dragoon, who conducted us to see the horses, showed us also his young daughter, eight or ten years of age, the side of whose nose exhibited a patch of herpes circinatus."

What, then, can be more conclusive than the identity in nature of these three affections? This identity is still further proved by the similarity of many of the symptoms of each; and this leads us to the general characters pertaining more or less to all the varieties of tinea tonsurans.

These are divided into three stages by Bazin, a Surgeon whose labours have done far more than those of any other to elucidate the nature and treatment of this previously complicated disease, who was the first to describe herpes circinatus, herpes tonsurans, and sycosis, as varieties of the same affection, and from whom I draw largely in these remarks.

In the first stage the itching is a very prominent symptom, and may precede or accompany the primary eruptions. These latter are very various, the most frequent being of an erythematous or vesicular type. Pustules are not very common; and papules and squamous eruptions, though rare, form sometimes the first manifestations. But the circumstance of the greatest interest with regard to all these, and one of great importance in a diagnostic point of view, is the circular form, which they almost invariably assume, although the reason for such a disposition is not at all known. The hairs also, where the skin is provided with them, undergo a very peculiar alteration; they are dry and dull, having lost their natural shining aspect. Their colour is different from that of the surrounding healthy ones, being reddish or greyish, according as the patient has light or dark hair. They are also frequently twisted, and, being very brittle, have a great tendency to break at the distance of a few lines from the skin, and when the greater portion of them are thus broken, as in ringworm of the head, the diseased surface has the appearance of a tonsure. And those hairs which are diseased, but not yet broken, are very apt to give way on attempting to extract them.

In the second stage the itching generally continues; there is slight swelling also, and the integuments almost invariably assume a darker tint. The eruptions which existed in the first stage may still be present, or may be absent at some points, and present at others, but the principal symptom of this stage is the appearance of the fungus, which, previously embedded between the epidermis and the derma, now shows itself on the hairs, and on the surface of the skin.

This parasitic matter, of a pure white colour, and powdery aspect, is not to be mistaken for epidermic scales, which have a yellowish or grayish appearance, and which are much less in the form of powder; but if there be any doubt the use of the microscope should immediately dissipate it. When in abundance, the tricophyton covers the epidermis between the hairs, when these are present, and forms for the latter a complete white sheath, which is very characteristic. The fungus makes its way to the surface almost immediately after the rupture of the hairs, and this latter symptom appears to appertain partly to the first, and partly to the second stage.

In the third, the parasite causes an inflammation of the hair-follicles and the surrounding tissues, and the pus, thus formed, acting as a parasiticide, destroys its exciting cause, so that the fungus is now no longer, or only rarely, to be found. From the extension of this inflammation pustules are produced, and even furuncles, and in the variety affecting the beard, profound indurations and large tubercles. In this stage, and in consequence of this inflammatory process also, the hair follicles are either obliterated, and permanent baldness produced, or, and this is more common, their secretion is vitiated, as is seen by the development of reddish or

(a) See Gibert's "Traité pratique des Maladies de la Peau et de la Syphilis," t. I, pp. 278, 279.

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yellowish hairs without capsules, and whose primary elements are no longer to be distinguished by the microscope. In this stage, therefore, although the parasite may be completely destroyed, the disease is kept up by the irritation of the unhealthy hairs, so that epilation is just as necessary as in the previous stages when the tricophyton flourished in all its luxuriance. But more of this hereafter.

In a word, then, the first stage is chiefly characterised by the remarkably circular form of the eruptions, and by the alteration of the hairs; the second, by the change in the colour of the skin of the affected parts, and by the presence of the white, powdery fungus on the epidermis and on the broken hairs; and the third, by the inflammation and suppuration of the hair-follicles and surrounding tissues, and, in consequence, by the disappearance of the fungus, the alopecia (or the formation of hairs very much altered or diseased), and the secondary eruptions.

These three stages are not met with in all the varieties equally. Thus, when the disease affects the body, it never passes the second stage, owing to the small number of hairs, and the parasite dies, from want of nourishment apparently; while the third stage is most prominent when the fungus has taken up its residence in the chin, where the hairs are in abundance, and where the quantity of loose cellular tissue favours the formation of the characteristic tubercles and indurations. On the scalp, on the other hand, there is very little subcutaneous tissue, and the pustular eruptions are, therefore, more frequently met with in this stage, and not the profound indurations met with in sycosis.

I pass now from these general remarks on the symptoms of tinea tonsurans, to the special characters of each of its three varieties, and, first, of

Herpes Circinatus.

Ringworm of the body—Herpès circiné—Erythema marginatum.—Tricophytie circinée (Hardy).

Herpes circinatus is an affection frequently met with in this country. It commences usually by a little rose-coloured, slightly elevated spot, about the size of a fourpenny piece, which becomes shortly the seat of slight furfuraceous desquamation and is accompanied by itching and sometimes by a tingling sensation. This spot gradually increases in size by uniform additions to its circumference so as still to retain its circular form; but as it extends circumferentially the healing process commences in the centre, so that in a short time we have a transformation of the small red spot into a large prominent erythematous ring enclosing a portion of sound skin. This process goes on for an indefinite period, the ring gradually increasing, till it may, in some cases, have a diameter of even four or five inches. Sometimes small vesicles or pustules form upon it, but this is the exception, and it generally retains the erythematous condition during the whole of its course, unless when subjected to inappropriate treatment. When herpes circinatus has lasted for some time, and has invaded a considerable extent of surface, the circle often becomes incomplete, the diseased process having terminated at some points, so that segments of circles alone are left. I cannot agree with those who describe a non-parasitic as well as a parasitic herpes circinatus, although this is the opinion of Hebra; and I am of opinion also that herpes iris, generally described as a separate affection, is merely a variety of the parasitic disease, which is, however, very rare, and consists of a series of erythematous circles, arranged concentrically. Although essentially parasitic in nature, and highly contagious, herpes circinatus may terminate spontaneously, the fungous growth having a very superficial situation, and the hairs being generally in small number and in a very rudimentary condition; so that it has not, so to speak, a sufficient hold upon the skin,—as Bazin expresses it, "the parasite dies from want of nourishment." Sometimes only one circle of herpes is met with, but there are usually several; and cases are sometimes to be seen in which a number of rings are found on all parts of the body. The seats of predilection of the eruption are the face and neck, and, when in connexion with, and in consequence of sycosis, on the front of the neck, and on the back and outside of the wrist and hand.

The diagnosis of herpes circinatus is very simple. The history of the case and the appearance of the eruption,—the elevated erythematous circles, or segments of circles, covered with furfuraceous desquamation, in which the parasite is detected with the microscope,—their seat, and their frequent association with herpes tonsurans, or sycosis, are characters not to be mistaken.

The disease which is most likely to be mistaken for it is erythema circinatum; but in it the red circles have not that distinct elevation which characterises those of herpes circinatus, and no parasite is to be detected. The history of the case also helps to clear up the diagnosis. I say nothing of the distinction between herpes circinatus and erythema marginatum, for I believe them to be one and the same disease.

The lepriform variety of psoriasis, when it is undergoing the process of cure, might be mistaken for herpes circinatus; for in this stage the thick scales have disappeared, and nothing is left but erythematous circles, or segments of circles, which have a great similarity to those of herpes circinatus. But even in such cases the usual appearance of patches of eruptions on the elbows and knees and the history of the case will prevent mistake.

An erythematous syphilitic eruption sometimes assumes the circular form, but the circles in this case are not nearly so prominent as in herpes circinatus; and besides, other symptoms of syphilis will usually be present which will prevent mistake,—and in all doubtful cases the history should be obtained.

The prognosis is by no means serious, for the eruption has generally a tendency to terminate spontaneously, the parasite having but a feeble hold upon the skin. It is also readily removed by appropriate treatment; but it must always be borne in mind, that persons affected with it are liable, by the spread of the disease, to attacks of the other varieties of tinea tonsurans, and those attacked should be isolated, for herpes circinatus is undoubtedly a contagious affection.

(To be continued.)

SUCCESSFUL CASE OF CÆSAREAN SECTION.

By JAMES EDMUNDS, L.R.C.P.E., M.R.C.S.

Emma P., a tall, well-formed woman, of very healthy family, 38 years of age; married ten years, has had two dead children, the last would have been six years old. Has had good health until two years ago, when she first experienced severe pain in coitu. Has since been troubled with fetid sanguinolent discharge and constant aching, lancinating pains in the loins, hips and thighs gradually increasing until now.

March 19, 1860.—The catamenia ceased, but she has since been troubled with an almost constant discharge.

June 19.—Quickened distinctly.

December 4, Tuesday, at 9 a.m.—Labour commenced suddenly, and in the afternoon she sent for the gentleman whom she had engaged to attend her.

December 6, Thursday.—I was requested to see her, and found projecting into the vagina, a hard mass, two inches in diameter, superficially ulcerated and tuberculated to such an extent, that I had great difficulty in making out the os uteri, but with firmness and care, I passed the left index finger through, and just managed with its tip to feel the child's head; my finger being immersed over two inches in a dense, unyielding tissue, referrible only to cancerous enlargement of the os and cervix uteri. She had frequent pains; muco-sanguineous discharge; soft warm dilatable vagina; pulse about 90. Nourishing diet, opium, and patience, were prescribed. Afterwards I saw her daily; the pains continued, the discharge was sometimes largely streaked with blood, her pulse gradually increased in frequency, she became much wearied, and on Sunday exhaustion was coming on, but the os had not yielded.

She was a calm, courageous, intelligent woman, and I now fully explained the cause of her suffering and danger, gradually breaking to her the alternatives which I conceived the case to present:—1st. Exhaustion and death from obstructed labour. 2nd. Laceration of the os uteri, and death from arterial hæmorrhage; or, on the other hand, two practicable operations for her relief: first, slitting up the os uteri and delivery by the forceps or craniotomy; second, the Cæsarean operation.

I made her fully understand each procedure, with its risks and contingencies. I told her that the former would cut through a mass of diseased tissue, immensely supplied with blood-vessels, whose mouths were out of reach, and would

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bleed so largely that both herself and child would probably perish; that the latter, by direct incision into the bowels, though so frightful to contemplate, yet, in my judgment, was the less dangerous. I told her to consider the matter, to consult her husband and parents, and send them round to me, when I would further explain to them, hear their decision, and arrange to meet in consultation any other Medical men they might name. Her friends came, and desired me to do for her what I thought best; said that she had fully made up her mind, and that whether she died or recovered, they also should be satisfied. I thought it expedient for others to share the responsibility, and Dr. Giles, of Limehouse, at midnight saw her with me.

She had now been nearly six days in labour. In the recumbent posture her pulse was 120, somewhat sharp, and rather weak. Her face showed anxiety and impending exhaustion. There was considerable muco-sanguineous discharge, the vagina was soft and thoroughly relaxed, but there was the same hard unyielding os uteri, and a most careful examination showed that there was no part of its periphery at all disposed to yield. I had seen some 2000 cases of midwifery, and my mind had clearly decided for abdominal hysterotomy. Dr. Giles concurred without hesitation, and the operation was fixed for three a.m. We left her, and my assistant Mr. W. P. Dukes administered a turpentine enema. Three other Medical friends then met us at my house. I read through a list of instruments and programme of procedure, which was thoroughly discussed and adopted, and the operation then carefully rehearsed.

I ascertained that no one present had been dissecting, or was in any way likely to be a source of infection; the instruments, needles, and silk were all new and in perfect order; lastly, we all cleansed our hands most thoroughly and made our way into the bedroom in detachments, shortly before the time appointed. As the patient's friends had been unable to obtain a first-rate nurse, Mrs. James Edmunds consented to be present and take charge of sundry minor arrangements.

Mr. Edmunds, senior, Dr. Giles, Mr. Nightingall, Mr. Nelham, Dr. Meeres, Mr. W. P. Dukes, and myself, were now present. I requested the four eldest to examine her carefully and deliberately, to thrust the finger well through the cancerous mass and reach the head if possible, to satisfy themselves that no fissure or dilatable portion of tissue existed, and, in short, to finally decide upon this formidable operation so as to share with me the responsibility of the proceeding, whatever the result might be. Unanimous concurrence followed, and the arrangements proceeded.

I had heard the brisk tic-tac of the fœtal heart in the left iliac fossa, where the child's back and shoulders proved to be, but I could not satisfy myself of the placenta's position. Dr. Meeres had thought he heard it in the right iliac fossa, and Dr. Giles corroborated him, but I pointed out that the same sound was audible also in the left, and we then thought both noises were caused by the iliacs sounding through the uterus, and as nothing like the souffle could be heard anywhere else, and through the os the head was distinctly felt to be covered by the membranes only, we conjectured that its seat was either at the back or fundus uteri, and that it was placed well for the operation. In fact, however, it was attached to the front of the upper part of the cervix extending right across, and thus simulating the sounds sometimes heard from the iliacs when the patient is recumbent.

She said she had passed water just before our arrival; nevertheless, an elastic male catheter was used, and a teacupful of urine escaped. Then with a large silver catheter, I broke through the membranes, and drew off a few ounces of liquor amnii.

She was now seated upon the edge of the foot of the bed, her legs hanging over, and the head and shoulders comfortably supported by pillows; a warm flannel petticoat being loosely tied round her waist.

Mrs. Edmunds was superintending the water, basins, bath, and other fire-place arrangements. Mr. Dukes had charge of the instruments, ligatures, etc. Mr. Nightingall and Mr. Nelham each took one side of the abdomen to keep its wall in close contact with the uterus, while the incisions were made, so as to prevent the passage of blood or fluid into the cavity of the peritoneum, and to hold back the intestines when needful. Dr. Meeres had charge of the chloroform, and I was to use the knife.

The chloroform was now commenced, and I again most thoroughly cleansed my hands to free them from urine or other possible contamination. In a few minutes the patient was insensible. I drew her flannel down to the hips, and, with a large heavy scalpel, made an incision upon the inner edge of the rectus muscle, and cut into its fibres from the navel down to within a short distance of the pubis, where I deepened it cautiously on account of the bladder. I then opened the cavity of the abdomen at the middle of the incision, carefully completed it downwards, and then, making a director of my two left fore-fingers, I rapidly slit up the peritoneum, the knife's back being to the intestines, and its point preceded and carefully guarded by the fingers.

The opening exposed the uterus, of a purplish rosy colour, and everywhere smooth and glistening except at the top of the incision. Here a roundish projection appeared, resembling a cancerous nodule, but it yielded readily to pressure, and was in fact a space where the muscular tissue was absent—a sort of uterine hernia. In horses which have been staked sufficiently to break the muscular wall, but not to lay open the cavity of the abdomen, analogous bulgings are often seen. Doubtless, unexpected uterine ruptures often spring from such imperfections of structure.

I now cut into the uterus from above downwards, in the median line, and its fibres retracted; but on deepening the incision by a second sweep of the knife, blood gushed rapidly out from large sinuses. I involuntarily said, "We have the placenta;" and some one else said, "She is dying;" but I instantaneously plunged the knife completely through the uterus and placenta, cutting upwards as I withdrew it. I then dropped the knife from my right hand, thrust the two left forefingers through the wound, and hooked out a portion of the placenta, drawing it carefully through and seizing it again with the right and left hands alternately until I had extracted the whole, when I dropped it, and recovering the knife, used the two left fingers again as a director, while I slit up the uterus, as I had previously done the peritoneum.

The child was in the first position, and having again dropped the knife, I seized the feet with my right hand and gently yet rapidly extracted it, steadying the uterus with my left hand above the incision. I passed the child and placenta to Mr. Dukes, who made it cry and separated the placenta. As I drew the child out, the uterus contracted, so as to embrace the head, and when this had escaped, it fully contracted and immediately receded, the intestines, at the same moment, flowing out from above in a most troublesome manner.

A shred of membrane showed through the uterine gap. I seized it and endeavoured to drag it out, but it broke away, and as it did so, I felt that the membranes were adherent, so I left them, carefully pushing back into the uterus with my finger what shreds I could not tear away. The uterine wound now seemed about two inches long, slightly gaping, of a pale pinkish or flesh-colour, and free from blood.

Messrs. Nightingall and Nelham now sustained the intestines on each side, most judiciously, whilst I, using my left hand to back-in the viscera and guard them from the needle, put in the first stitch about three-quarters-of-an-inch from the top of the incision, including no muscular fibres, nothing but skin and adipose tissue, Mr. Nelham cleverly seizing the needle and drawing it through, whilst my hands held the intestines and skin in place. And so the wound was closed with ten stitches of the interrupted suture. The first six were with double silk, and four single threads at the intervals. The needles were about three inches long, and moderately curved; the silk as large as small whipcord, and well waxed.

The abdomen was then sponged, and strips of non-resinous adhesive plaster on unglazed calico were applied, so as to adjust and secure the edges most accurately. A firm roll of lint about the size of a large cane was now laid about an inch from the incision on each side and held there while I so fixed it with plaster as to press the deep parts together, and the pelvis was then raised, whilst I rapidly wound a long four-inch bandage round the abdomen. The pillows were shifted, and the patient was drawn up into a comfortable position, with her head but slightly raised. After about ten minutes she became conscious, and only then realised the fact that she was delivered.

She was now covered with a woollen shawl, so as to be cool, yet free from draught, and more clothing was to be added when she felt chilly. A drachm of nepenthe, with a

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tablespoonful of brandy, was given to her in water; absolute repose enjoined; and she was to drink from a teapot beef-tea, broth, and milk and water, at her own discretion.

After careful examination, we estimated the quantity of blood lost at not more than fifteen or sixteen ounces,—a result which surprised and greatly pleased us. The gush must have been instantaneously arrested by dragging the placenta through the wound, and she afterwards lost none whatever. Dr. Meeres kindly stayed to watch for shock or symptoms of hæmorrhage; but nothing of the kind occurred, and he soon left her in charge of Mr. Dukes. At noon she was calm and comfortable; pulse about 110; passed water during the day; had some tenderness of the abdomen, and severe suffering from the after-pains. Beef-tea and broth, milk and water, and thin custards, with grapes and oranges, were directed to be taken at her own discretion. No medicine, except scruple doses of anodyne when the pain returned.

Tuesday Morning.—Had dozed calmly for some hours, and passed water; was still going on with her nourishment and fruit, but taking no stimulus. Pulse 120.

Wednesday.—Had slept some hours; after-pains still troublesome; urine passed; bowels unmoved; abdomen tympanitic and very tender. I snipped the bandage, and at night drew off the urine. No lochia, but breasts filling. Continue the nourishment, fruit, and anodyne.

Thursday, 4th day.—Has passed a bad night; posture and facies characteristic of peritonitis; abdomen greatly distended and exquisitely tender; had been vomiting all night, and everything swallowed was instantly returned, with a bitter, acid taste; bowels still unmoved; pulse 140; no lochia, but breasts full and hard. I cut through the bandage, passed the catheter, and gave a little calcined magnesia for the heartburn. I then ordered her to take nothing by the stomach except ice, which she sucked largely. Beef-tea, with a little anodyne, was administered per anum, and the long tube passed into the bowel, and gradually wheedled up eight or ten inches without appearing to have curved. The tube was left in for a few hours; a large quantity of flatus gradually escaped; the bowels acted moderately; she was considerably relieved, and the sickness ceased to be troublesome. Towards evening she passed water, but nevertheless the catheter was used. At bed-time she had ℥ss of nepenthe and a half-pint of beef-tea injected per anum. During the night she sucked ice.

Friday Morning.—Somewhat better; abdomen less swollen and less tender; posture less expressive of anxiety; had passed water, but I again used the catheter; sickness had ceased; was very grateful for the ice,—besides which she had swallowed nothing for more than twenty-four hours. Mutton broth, jelly, and barley-water, with fruit, and continue the ice if needful. In the evening a hot, wet flannel was put on the abdomen, and the plaster, having been softened, was removed. The wound was beautifully united, and showed not a pucker or point of matter. The six large stitches were carefully taken out, leaving the four supplementary ones; the wound was cautiously sponged and again secured with plaster and flannel bandage. At night she had an injection of beef-tea with a little anodyne: passed a comfortable night, and was much better on Saturday morning. From this time (6th day) the tympanites and tenderness gradually disappeared; the bladder acted; the bowels responded daily to the long tube; milk ran from the breasts, and she recovered rapidly; but no discharge until about the ninth day, though after that time the lochia were abundant.

On Monday, the eighth day, the remaining stitches were removed and the abdomen again carefully secured with plaster and flannel bandage.

On Thursday the wound was again dressed, when it was quite consolidated.

On Wednesday and Thursday she was on the sofa to her dinner, and on Friday she sat up for a few hours.

On the eighth day she began to suckle the child, but after a few days her milk failed, and the child returned to the bottle. It suffered from clumsy feeding and the severe weather, but is now in better hands and thriving.

On Sunday, the fourteenth day, the wound was again dressed,—it was in most perfect apposition, and so soundly consolidated that coughing hurt her but little; lochia still abundant, and milk again running from the breasts.

Remarks.—Irrespective of the actually successful results, we believed that Cæsarean section gave this mother a better chance than embryotomy, and thus was averted the painful task of weighing the infant life against maternal risk. The position of the placenta was a curious coincidence, and, had we known it, would perhaps have deterred us from the operation; yet this case will establish the fact, that, if it be done with resolution and rapidity, the placenta may be cut through, and dragged out first, without losing either mother or child, and also that it is unnecessary to endanger the arteries on either side of the uterus in order to avoid the placenta. The gush of blood which followed the second stroke of the knife left no time for consultation or even for thought, and I instinctively adapted Dr. Simpson's practice to the emergency. The placenta had been transfixed a little above and to the left of its centre. The remaining of the membranes caused much anxiety; still, they seemed firmly adherent, and it was best to leave them. I think it most important that we pushed back into the uterine cavity some long protruding shreds, else the peritonitis would most likely have proved fatal. No membranes have passed per vaginam—probably they will be disintegrated, and gradually discharged; no lochia appeared until the ninth day, although the breasts filled on the fourth, and the milk remaining through the severe symptoms of the fifth day, sustained my hopes of her recovery. The turpentine was used to clear out the gaseous and feculent contents of the intestines, and also in hopes that it might prevent hæmorrhage. The exclusion of all sources of infection—pure instruments and sponges, and thorough cleansing of the hands,—are points to which great care was given. No drugs were administered, except a simple anodyne: no mercury on the one hand, and no brandy on the other. She took simple and varied nourishment, with fruit. I thought these great incisions more likely to be healed by Nature in her own way than by Nature under the influence of either mercury or brandy. The peritonitis, though severe, was treated simply; the result answered expectations, and confirms the practice.

This case will help to diminish the hitherto frightful death-rate of our Cæsarean operations.

2, Spital-square.

THE PRESENT CONDITION OF A LIMB WHERE EXCISION OF THE KNEE-JOINT WAS PERFORMED SIX YEARS AGO.

By HENRY SMITH, F.R.C.S.

A few days since, a patient upon whom I performed the operation of excision of the knee-joint upwards of six years ago, called upon me, and I had the opportunity of ascertaining the present state of the member, and of noting accurately whether or not there had been any increase in the length of the limb since I measured it, according to my note-book on April 28, 1855. On that date I find that the operated limb was exactly two inches and a quarter shorter than the other, that the lad was able to run about well with a boot nearly two inches higher than the other. At this period, and for some time afterwards, the union at the joint, although as regards practical purposes, everything to be desired, was not bony, there being some decided mobility of the two surfaces. The boy, I find, was, at the time of the operation, aged seven, and the amount of bone removed was one inch and three-quarters.

On examining him now, I find that the limb is perfectly set at the point of operation by an immoveable bony anchylosis, and that on measuring the leg from the knee, there is a shortening of five inches. This, however, is not the absolute amount, for there is a considerable prominence of the end of the femur in front, caused, doubtless, by the ham-string muscles having drawn the upper extremity of the tibia backwards, thus there is somewhat of an angle formed at the knee, and the limb, of course, cannot be brought quite into a straight position, therefore, if we allow one inch for this condition, the real shortening at present is four inches, or two inches and a quarter more than it was nearly six years since.

With regard to the utility of the limb, I may mention that it is most serviceable to the boy, who informs me that he can walk to Hampstead Heath and back to London, notwithstanding that he uses a very heavy and cumbersome apparatus, occasionally worn by those who have great shortening at the

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hip. The boy, who is now thirteen, has grown very tall, and is in excellent health.

This case, so far as I can judge, tells both for and against the operation of excision of the knee-joint in young children. It proves that the opinions of those who assert that the limb does not keep pace in growth with its sound fellow in some instances, is correct; and if this be a valid objection to the operation in children, my own case may be adduced as affording this objection. I must confess that I have been disposed of late, after examination of many cases, and after careful reflection, to consider that this operation, admirable and useful as it is, is not by any means attended with such excellent results in growing children as in adults, or in persons who have nearly completed their growth. The results obtained in some of the latter cases operated upon by Mr. Fergusson, and in one instance I saw not long ago by Mr. Price, are truly wonderful, there being scarcely any perceptible deformity; but in these the patients had either completed, or nearly completed, their growth.

On the other hand, the case I have brought forward shows the value of the operation; for although the leg has become a great deal shorter, it is for all practical purposes a very useful one, and has been so for six years. Moreover, I must mention that at the date this operation was performed,—one of the earliest in London,—we were not so well furnished with those excellent appliances which are now used in the after-treatment, and by which the Surgeon can, by great care and attention, prevent some of those ill-consequences which are liable to occur, and one of which did occur in my own case,—viz. some retraction of the extremity of the tibia, resulting practically in the loss of a good useful inch to the boy's leg.

It would, I think, be useful and interesting if other Surgeons would furnish us with the present condition of those patients, especially of young children, who have been operated upon some years ago.

Caroline-street, Bedford-square.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

CONDUCTED BY

JONATHAN HUTCHINSON,

Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital.

A CLINICAL REPORT ON TRUE RINGWORM.

The detailed investigation of clinical facts as to true Favus, upon which I entered in these pages some months since, seemed to lead us to one very important conclusion. Whoever will thoughtfully examine the data and arguments there adduced, can, I think, form no other opinion than that Favus is a disease, from beginning to end, *ab ovo usque ad mala*, of cryptogamic causation, and purely local. It was shown, in the first place, that the fungus is present in all cases and in all stages of the disease; and secondly, that the transplantation of that fungus, whether by accident or intentionally, was sufficient to produce the disease in perfectly healthy persons. Thirdly, by the citation of a long series of individual cases I showed that its subjects do not as a rule display any indications of the strumous diathesis; and I confirmed this deduction by citing assertions to the same effect from writers who had enjoyed much more extensive opportunities for investigating the disease than can be had in England. Fourthly, it was proved by two cases that the disease may exist in a severe form on the scalp for from twenty to thirty years, the patients remaining all the time in perfect health. In conclusion, I drew attention to the facts, that although many writers have insisted on the supposed value of constitutional remedies, yet none have ventured to rely upon such alone; and that there is not on record one iota of evidence in support of the belief that it is possible to influence in the least the eruption of favus by altering the state of the patient's health.

The discussion as to whether the fungus which attends it is or is not the real cause of Favus, possesses great practical importance. A large majority of English authorities advocate the opinion that constitutional predisposition is necessary for its production, and, consequently, that internal medication is needed for its cure. As to what the constitutional tendency may be, however, very different are the views held. A distinguished dermatologist and Medical teacher in Edinburgh regards it as tuberculous, and consequently advises tonics, meat, and cod-liver oil; while another in Dublin, of no less authority, prescribes the iodide of arsenic, and insists on his patients strictly confining themselves to a milk diet. Now, supposing both these hypotheses as to constitutional taint to be erroneous, the patients must suffer in two respects:—Edinburgh, from the comparative neglect of local treatment, which reliance upon internal remedies may be supposed likely to induce; and in Dublin not only from this, but from the injurious influence of powerful drugs and an impoverished diet-scale. I put the question in this light simply from a wish to show that the question is one well worthy of conscientious attention, and not from the slightest desire to reflect on the practice of others. In Paris, as with us, the question has lately excited much attention, and there, as here, the opinion is, I believe, slowly advancing, which considers the fungus as the true and sole cause of the eruption. So recently as the time of Sydenham scabies was considered a disease of the blood, and in bad cases patients were to be salivated for its cure. There is little doubt but that before long we shall regard the use of arsenicals, iodides, and mercurials in favus in the same light which we now do the powerful remedies which Sydenham and Turner were wont to order for the cure of itch.

But the decision as to the true cause of Favus is of importance not only in respect to the treatment of patients affected with that disease. Favus may, in a certain sense, be considered the type of the whole class of cryptogamic diseases of the skin. If it be proved to be purely local, so, in all probability, are the two forms of true ring-worm (that on the scalp and that on the general surface), and the pityriasis versicolor or liver spots, so often seen on the chest and abdomen. Both these latter are constantly attended by a cryptogam, both are contagious, both occur in healthy persons, and both, like favus, are curable by local means.

I now purpose to examine the facts which bear upon the pathology of True Ringworm, in the same manner, though not in so much detail as was done in the case of Favus.

By the name True Ringworm, or Tinea tondens, it is intended to designate the disease described under that of Herpes tonsurans, by Hebra; Porrigo scutulata, by Willan and Bateman; Tinea tondens, or tonsurans, by Dr. Jenner; Trichosis furfuracea, by Mr. E. Wilson; Herpes circinatus by Mr. Erichsen. It is a well-characterised affection, and, for the most part, easily distinguished from all others. It occurs in the form of circular patches on the scalps of children, the surface of each patch showing the ends of broken hairs, and a thin branny scurf. There is no purulent crust whatever. The integument is always somewhat discoloured, being slightly browner than the adjacent parts. The stumps of hairs are usually from an eighth to a-quarter of an inch long, and may be seen by the naked eye to be split up and shreddy as well as broken off. At the circumference of the patches there is always a slight increase of the scurfiness and some degree of redness, while now and then a few minute vesicles are visible. These appearances justify the use of the word Ring; but it must be remembered that the disease always shows itself in circular patches and never in rings only. True ringworm is very rare on the scalp after the age of puberty. It is, however, occasionally met with up to adult age, but almost never in those further advanced in years. It is very readily contagious to other children. It is difficult of cure, and often lasts many months, seldom, however, causing any further symptoms than the partially bald patches above described. It is, as compared with Favus, a common disease, but a rare one if contrasted with the eruptions on the scalps of children, which are attended by purulent crusts (Common Porrigo, Eczema, Impetigo, etc.) All recent writers on the subject agree in the observation that the hairs affected by this disease are infiltrated by sporules; and all, with the exception of Mr. E. Wilson, agree in considering these sporules as those of a fungus (tricophyton tonsurans). As to the part which the fungus plays in the production of the eruption,—

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whether it is the sole cause, or only a concomitant,—opinions differ, as above noted, in the case of its congener Favus.

In order to obtain a basis of fact upon which to proceed in some degree of certainty I will briefly quote from my note-books the particulars of about forty cases of ringworm. Of these the first twenty-three were observed at the Hospital for Skin Diseases during the years 1854 and 1855, and the latter twenty comprise all that have come under my treatment during the last seven years at the Metropolitan Free Hospital. From the latter fact some inference may be safely drawn as to the frequency of the disease among the London poor since I have carefully kept notes of all cases.

Case 1.—*Ringworm of the Scalp in a Healthy Child—Microscopic Examination.*

Frederic B., aged 6, of light complexion, fair and florid, in excellent health and without the slightest sign of struma. No history of struma in his family. On his occiput was a single large patch of ringworm about the size of a crown piece. It had existed three weeks, and although he had several sisters no contagion had as yet occurred.

Condition of the Patches.—The hairs broken off at a tolerably even length, about a quarter of an inch; they look shrivelled and dry, not visibly split at their extremities, but presenting in their dry, branny condition a marked contrast to the glossy hair which surrounds the patch. Around the circumference of the patch was a ring of minute pustules. The broken hairs were easily pulled out of their sheaths by forceps.

Microscopic Examination.—All the hairs examined had broken, split-up extremities; their sides often showed detached scales. The hair-shafts were dark, being crammed with sporules. The sporules in many instances were seen adhering to the sides of the hairs. The bulbs of the hairs were plump and much less extensively diseased than the shafts; they, however, contained many sporules arranged in groups. The appended wood-cut illustrates these appearances.

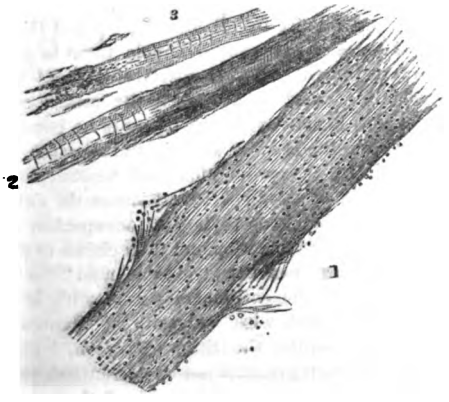

Fig. 1 shows a small portion of a ringworm hair highly magnified. Sporules are seen infiltrating its texture, and in several parts its outer laminæ are split off.

Figs. 2 and 3 show ringworm hairs less highly magnified, and in which only the darkened colour and fasciculated texture are discoverable. In both the disease is more advanced in the part of the hair near to its broken extremity than at the other end. In the black and fasciculated portions the infiltration of sporules would be easily demonstrated by a higher power.

Case 2.—*Ringworm on the Scalp, with the History of a Patch on the Arm also—Cure—One Patch remaining Bald.*

In the following case the disease was just cured at the time the notes were taken. In two of the patches the hair appeared to be growing freely again, but a third was left in a state of complete baldness. It is not very unusual for ringworm to destroy the hair-bulbs and leave permanently bald patches.

Thomas B., aged 11, in excellent health, of fair complexion and florid. He was stated to have formerly had enlarged glands in the neck, but there was no other evidence of "struma." The disease had begun five months before the note was taken: and the first patch was on his right arm He had attributed it to handling a horse. Soon afterwards he had three patches on his scalp as large as halfpence. He had several brothers and sisters, but the disease had not spread, strict precautions having been taken.

At the date of my note the boy had been five months under treatment and was just well. The treatment had been by blistering with the vesicating fluid (four times), and the use of a nitric acid lotion. Arsenic had been given internally. On two of the patches the hair was growing freely, but on the third the skin was smooth and glossy, as in alopecia areata. On none were there any scales or broken hairs, and the microscope showed that the new hairs were quite healthy.

Case 3.—*Ringworm on the Scalp, Forehead, and Chest—Contagion to the Child's Mother (on the Neck)—Microscopic Examination.*

Emma B., aged 5, a puny child, of brown complexion, liable to headaches. She was stated to have had a swollen gland in the left side of her neck, but had presented no other strumous symptom. The ringworm had existed six weeks and was stated to have begun on the forehead and spread thence on to the scalp. It now involved half the scalp in one patch, besides which were many smaller detached ones; all quite round. A few small spots in the chest. Her mother had caught it and showed some patches on her neck, none on the scalp.

Condition of the Patches.—The hairs were all broken short and looked dry and frizzled. There was much white branny scurf. In one or two places there were a few red spots, but nowhere any distinct vesicles. The hairs were so rotten that they could not be pulled out.

Microscopic Examination.—The hairs at both their broken ends were split and ragged. The shafts were made almost black by the infiltration of sporules, but in many, on account of the density it was difficult to distinguish the individual sporules, in many others, however, they were clearly apparent. In a few I observed the external parts of hairs just beginning to be attached, the sporules being present only in their outer laminæ. In several instances large clusters of sporules existed quite external to the hair, thus completely disproving (if any need of disproof existed) Mr. Wilson's theory of fatty degeneration.

Case 4.—*Ringworm in a very Early Stage on the Scalp—Microscopic Examination.*

Sarah P., a delicate girl, aged 5, of dark complexion, wholly free from any external manifestation of struma. Her brother and sister had had ringworm, caught, as was supposed, from a playmate known to have it. In the patient the disease had existed only a fortnight. The patches were on the vertex on each side of the middle line.

Condition of the Patches.—The hair had been cut short all over. On the patches the only difference noticeable was, that the stumps of hair looked thin, and had lost their gloss. They could not be seen to be split, or at all matted. The patches were covered with thin scales.

Microscopic Examination.—Most of the hairs pulled from the patches were healthy. A few were dark coloured, and contained sporules. These latter had broken, split extremities

In this case it was clear that the fungus had spread very superficially. It had attacked the epidermis more extensively than the hairs. This peculiarity might possibly be accounted for by the fact, that the girl had black, strong hair.

Case 5.—*Ringworm on the Scalp of an Infant—Disease Slight, and Hairs not Generally Involved.*

An infant, aged four months, pallid, but fairly stout, at the breast, and considered by its mother to be in very good health. The ringworm had only existed a week or two, and involved almost the whole scalp in large patches.

Condition of the Patches.—The hairs were very little destroyed. The patches were marked out by mere rings of dark brown scales, which latter were very thin. The skin of the affected parts did not appear to be thickened, and in the centres of the patches long hairs grew.

Microscopic Examination.—Most of the hairs pulled from the edges of the patches were in a healthy state, but some of them presented good examples of the sporule-infiltrated condition.

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Case 6. — Ringworm of the Scalp — History of Contagion — Extensive Disease of the Hairs.

George R., aged 4, a stout, pallid boy, in good health, with brown hair and blue eyes, and wholly free from evidences of struma. He was believed to have caught ringworm from another child who was affected by it. The disease in him had existed two weeks, and there were now four patches about the size of crown pieces on different parts of the scalp.

Condition of the Patches.—Covered with short ragged hairs and a thin, whitish, branny scurf. The margins of the patches showed a rim of thicker crust.

Microscopic Examination. — Hairs crammed in all parts with sporules, split up, and with fragments of cortex detached. Most of them had broken off short in the attempt to draw them out. In one of which the bulb had been extracted, although sporules were seen in the latter, yet they were much less abundant than in the hair-shaft itself.

Case 7.— Ringworm of the Scalp — Microscopic Examination.

Blanche D., aged 7, florid and very healthy-looking, of fair complexion. Her scalp was covered by numerous patches of ringworm varying in size from a halfpenny to a pea. The disease had existed six weeks. No history of contagion was known.

Condition of the Patches.—Hairs broken and short ; a thin, scaly crust present. The patches not well circumscribed.

Microscopic Examination.—Presenting the usual appearances. Hairs much swollen and crammed with sporules, the latter being especially abundant near the cortex. In most of the hairs the cortex had been split away, leaving the shaft rough and rugged.

Case 8.—Ringworm on the Scalp—History of Double Contagion.

Mary Ann E., an Irish child, aged 5, stout and very healthy looking, of brown hair and eyes. She was believed to have caught ringworm in a workhouse, of which she had been a temporary inmate, and her infant sister had since contracted the disease. It had existed for five months. There were numerous ill-defined patches, and indeed, almost the whole of the scalp was in a scaly condition.

Condition of the Patches.—Nearly destitute of hair, and scaly. Hairs short and broken.

Cases 9, 10, and 11.—Ringworm on the Scalp and Forehead—Disease Extensive, in a very Healthy Child—Contagion to Two other Children—Microscopic Examination.

Ann R., aged 5, a stout, florid child, of fair complexion, without the slightest indication of struma, and accustomed to live well. The disease had first shown itself two months before, and numerous patches from the size of a sixpence to that of a penny now existed in different parts of the scalp. There was also a patch on the skin of the forehead. It was not known how it had been caught, but a brother and sister, aged respectively three years and one, had since taken it. Both these other children were in good health.

Condition of the Patches.—Covered with short, broken hairs and a thin white scurf. Some slight thickening of the integument.

Microscopic Examination.—In the broken hairs from the scalp the usual features were seen. I also found sporules in the epidermic scales from the patch on the forehead, and a downy hair from the same patch, showed the infiltration by sporules in an advanced degree.

Case 12.—Ringworm of the Scalp in a Healthy Child—History of Contagion.

Mary Ann G., aged 2 years and-a-half, florid of fair complexion, as healthy a looking child as I ever saw. She was supposed to have caught ringworm from a playfellow who was known to have it. The patch had existed one week, and was in the left side of the head. It presented the usual features. No further note.

Cases 13, 14, 15, 16, and 17.—Ringworm of the Scalp in Five Children Living in the same House—History of Contagion.

Henry B., aged 3 months; Arthur B., aged 16 months; and three elder children not relatives, but living in the same house. All the children were in good health, though most of them were rather pallid. None of them showed any indication of struma whatever. They had been well cared for. The eldest was known to have caught it from other children, and it had evidently spread by contagion through the house. The patches showed the usual features to the naked eye, and the microscope revealed the usual conditions in the hairs. In all the children the disease was confined to the scalp.

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Medical Times and Gazette.

SATURDAY, JANUARY 5.

THE COLLEGE OF PHYSICIANS AND THE FUTURE OF THE GENERAL PRACTITIONER.

With the New Year there seems every probability of a movement which will inprove the social position of the General Practitioners of England by affiliating them to the College of Physicians, instead of to the Society of Apothecaries as heretofore.

It is almost a truism to say that English institutions, excellent as they are, are full of anomalies ; and this because the practical sense of the people impels them to go to work with any materials that offer themselves, without respect to original principles, and to disregard the means so as they attain the end. Hence, although there is no country under the sun in which life is more sacred, and greater skill and care employed in the prevention and treatment of sickness, yet the mass of Medical Practitioners do not enjoy a designation which betokens their real occupation, or which fairly represents their education and their claims to the respect of society. The commonest title, "Medical man" (or "Medical person," as some of the cottonocracy render it), is correct in essence, though tinged with vulgarity; "General Practitioner" is vague; whilst the title "Surgeon," though not dishonourable now, represents not one-twentieth part of the necessary qualifications and daily duties of the great mass of those who adopt it. Surgery is the ennobled offshoot of a calling which originally was almost menial; and even now, necessary as is the study of surgical details, the separate study of surgical principles, or pathology, apart from Medical pathology, is a mischievous mistake. The human body is but one ; and whether the Physician have to treat diphtherite or typhoid, or the Surgeon erysipelas or pyæmia, or the Obstetrician puerperal fever, the treatment of analogous conditions, arising from almost identical causes, cannot be studied apart without confusion and mischief.

But if "Chirurgeon," that descendant of the barber, be an inadequate title for the General Practitioner, the word "Apothecary" is not merely insufficient, but unworthy. Originally an offshoot from the Grocer—(we wonder, by-the-bye, that Darwin has never seized upon these processes of differentiation and developement of trades to illustrate his palæozoic theories)—the Apothecary, or keeper of a storehouse for drugs, by degrees superadded some rudiments of Medical knowledge to his knowledge of drugs, in order to direct his

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customers in their selection of remedies, and to advise such as came for "something good for" any given complaint, just as the Chemist and Druggist does now. We have seen the day-books and some of the accounts of country Apothecaries who lived more than a century ago; and it is evident that their business was that of respectable tradesmen, who bled, drew teeth, attended medically, supplied medicines, and sold a great variety of materials, — comprising drugs, oil and colours, cattle medicine, lozenges, arrowroot, and medical comforts. The country Apothecaries got what knowledge they could from the "Medulla Medicinæ," and other handbooks of the day; and they kept carefully for use such Physicians' prescriptions as fell into their hands; and they, doubtless, possessed good common-sense notions of treatment, and did good in their generation. It is absurd to suppose that they were a mere illiterate body, though there were illiterate men amongst them. But they were essentially tradesmen; and, although the documents we have referred to show that they did charge for visits a hundred years ago, yet the bulk of their emolument was entirely derived from the sale or supply of medicines. Many of them, later in the century, obtained Surgical diplomas in London or Edinburgh; or came up and walked the Hospitals for a few months; or attended some Physician who "read" a short course of lectures; but till the year 1815 the men who were virtually the Medical attendants of the whole population,—to whom the charge of women and children was universally confided,—and in whose daily duties amongst the civil population there must have been forty-nine Medical and Obstetric cases to one Surgical,—were left utterly without any fixed and specific training, and without any examination to secure competency in forty-nine-fiftieths of their practice.

In that year, when the necessity was generally admitted that some authority should be exercised over the education and qualifications of the General Practitioner, the London College of Physicians refused to undertake the charge. Hence that duty was not so much sought by, as imposed upon, the London Society of Apothecaries.

Indeed, the claims of the Society of Apothecaries at that date were much greater than they now seem to be. This Society included all the more eminent General Practitioners of the Metropolis, especially those about the persons of the Royal Family: and, both with royalty and with the nobility, the leading Apothecaries were honoured and confidential friends. They had been conspicuous in the pursuit of such branches of Natural History as related to their special vocation. Their garden at Chelsea was to the London of 1760 what Kew and Chiswick are in our own days. The worthies whose portraits may have been seen by some of us at the dinners at Apothecaries' Hall were men of mark in their generation. They always exacted a competent knowledge of Latin from their apprentices. The "Pharmacologia" of Dale, written in good Latin, in 1726, would have done honour to a Fellow of the College of Physicians. They provided gratuitous lectures on Botany and Chemistry, and held regular botanical excursions, in days long ere Lindley was, and whilst the present apparatus of schools and lectures did not exist. And there was always a scientific tradition amongst them, embodied in such men as the Wheelers and Ridouts, who live in our memories, and Bacot and Brande, and N. B. Ward—(whose cases, filled with fresh plants, ought to bring blessings on his head from every sickly townsman, and gave the parent idea of the Crystal Palace),—who survive in the flesh, and long may they be spared.

At that day, then, the Society of Apothecaries was no ignoble corporation, and not unworthy of its task; and to see how they have carried out that task we need only say *Circumspice;* for the character of the present generation of General Medical Practitioners, and the Medical Schools in which they are trained, are the creation of the successive Courts of Examiners of the Apothecaries' Society. By slow degrees, between 1815 and 1831 or thereabouts, they gradually increased the course of Medical training, which they insisted on. At first it was of the humblest order; only prescriptions, materia medica, and a little practice of physic. But in the last-named year they began, and, about 1852, completed a curriculum which really leaves little to be desired. We say they *created* lectures; because it is perfectly certain that before the present organisation of Medical Schools was established, Lecturers acted like so many independent units, and the youths who came to London, not being bound by the curriculum or discipline of the Schools (which did not then exist), used to enter to as many courses as they were obliged to attend and no more. It was the "Regulation" issued by the "Hall" which at first created the necessity for attendance on Lectures, and which secured the Lecturer his fees. By degrees every branch of Medicine, and almost every branch of the collateral sciences, became a part of the curriculum at the "Hall;" and each successive advance, such as the addition of chemical manipulations, of clinical instruction in the Hospital as a substitute for Lectures in the Theatre, and the imposition of a thoroughly good preliminary classical examination, betrays the handiwork of men thoroughly alive to the wants of the Profession and the claims of society.

But, it will be said, if the work has been so well done, why innovate, why transfer the authority to another body?

Because, well as the work has been done, nobody is satisfied with the actual condition of things. A Society of Apothecaries discharging the duties of legislation in matters of general education and science is an anomaly. If the Apothecary does his work so well, and such work, he is fit to be something better than an Apothecary. In the process of development he has become something better. The right and title to practise as an Apothecary in England and Wales, is not a dignity sufficient as the reward of a course of study which, under the institutions of any other country, would have made a man an M.D. or a Physician. When the Licence is obtained, then the connexion of the Licentiate with the Hall ceases. No feelings of affection or pride are raised by the gloomy precincts of Blackfriars. The place speaks of trade, and resounds with the hum of the steam-engine; no sound of science or literature. The Apothecaries have not, in their own presumed specialty, advanced with the age, nor do they hold, in 1860, a relative position to other scientific bodies, such as they held in 1800. Immaculate as they are in the purity of their drugs, yet they advance no new discoveries; no records of experiments on the composition of new medicines or their effects, are ever known to issue from their portals. The closeness of their Corporation is such, that the General Practitioners of London, as a body, are not represented by it (and this is a fatal mistake). Of their own Court of Examiners, selected from their own members, fully one-half are, we believe, either M.D.'s, or Members of the College of Physicians, or both. The use of drugs, instead of being the chief instrument in the prevention and treatment of disease, is, as the laws of life are better understood, becoming subordinate to air, exercise, and diet. Patients ask how they shall live—not what they shall take. That element of Medical remuneration, which consists in the charge for medicines, is rapidly vanishing; and charges for attendance are taking its place. And lastly, the title "Apothecary" is one which a man would rather deny than own; in any country besides England, it would make a man rank with tradesmen at once. In the literature of most countries it is ridiculous or contemptible, if not hateful. Physicians may be ridiculed on the stage by chance; but Apothecaries are ridiculous always and *ipso facto*. Medical Practitioners feel universally, that their status is not what it ought to be. There

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need be no reserve on this point in a Medical Journal: let us out with it frankly, and confess that side by side with even the lawyer and the curate, the "Medical man" occupies not quite an equal place. Nor is this merely because he has not the University degree of the curate, nor the money-getting facilities of the attorney. It is because of the taint of trade, and the title of Apothecary. The education of "Medical men" of the present day, is little inferior to that implied by B.A.; but the educated man does not get his proper status, and he chafes under it. And yet, to get a tradesman's title they are ashamed of, English Practitioners, we repeat, go through an expensive and protracted education, which in Scotland, or in America, or any country in the world, would procure academic honours, and some rank in society!

All these are reasons why either the Apothecary should change his name, and the Medical Practitioner, who is really the Physician to forty-nine fiftieths of the population, should have a designation and status commensurate with his duties and his deserts. To be a Licentiate of the College of Physicians, is to possess such a designation; it implies the fact that the possessor is occupied with the study of Nature, and the treatment of disease;—not that he makes the treatment of disease a mere expedient for disposing of supplies of medicine.

But in carrying out this much-to-be-desired reform, we hold that it ought to be done in such a way as to inflict no injury nor injustice on existing interests; and this in two important particulars:—

In the first place, it is not good for the Profession and the public, that there should be a Pariah class, excluded from all Professional honours, and from the incentive to distinction which the hope of honour gives. It is true that the class of General Practitioners, from whom the Examiners of the Hall are chosen, is not a large one; but we have understood that among those persons who are eligible to that office, there always has been a tendency to keep up chemical, clinical, and classical studies, and to produce evidence to the Worshipful Corporation that they have claims for the office greater than those of their competitors. It will be an evil day when money-making is the sole end that the Practitioner looks to; and it will be a wholesome thing to let it be known that the pursuit of science, and good Professional reputation, may entitle him, as at present, to a seat at a Board of Examiners. We hold that the College of Physicians, in undertaking the duties of a Court of Examiners for General Practitioners, ought not to take from these Practitioners any privileges which they now possess, so far as those privileges tend to the elevation and greater usefulness of their class. Besides, the present Practitioners have a right to be certain that the standard of education shall not be lowered.

In the next place, existing Practitioners, practising legally, and having undergone the ordeal which later examinations at the Hall imply, ought easily to be admitted to the newly-modified licence. It is not fair to men who have invested their capital in practice, on the strength of qualifications obtained in strict obedience to existing law, that they should be subjected suddenly to competition with men who, by no higher education, may obtain a higher sounding title, and who propose avowedly to violate the law—that is, to act as Apothecaries in the teeth of the Act of 1815.

It is not unfair to predict a perfect flood of litigation and heart-burning on this score—a litigation possibly fatal to the comfort and respectability of the new Licentiates.

But the College in undertaking now a duty which, to the detriment of the Profession, it scorned half-a-century ago, can scarcely set at defiance a law for the passing of which it was virtually responsible, without making much ill blood. Let the change be made; yet, according to the Apostolic axiom, Πάντα εὐσχημόνως καὶ κατὰ τάξιν γινέσθω.

THE WEEK.

The Medical Quarterlies have appeared this week; but the only one on which we have been able to bestow more than a glance is the *British and Foreign Medico-Chirurgical Review*. This contains several articles of great interest, and one of unusual ability—quite equal in literary talent to the best essays in the *Quarterly* or *Edinburgh*—on the Introductory Lectures of last October. We may have to refer hereafter to this and other articles; but the following striking passage must be given now. It is one of the indications of the reaction which has begun to set in strongly against the abuse of stimulants, which has of late years been increasing until at last it is working its own reformation. The writer says:—

"Would that some Physician of mature experience had opened the academical year by a grave, unsparing exposure of the practices now in vogue of poisoning the sick and the feeble with food which in quantity they vainly strive to digest, of spoiling blood that is healthy, of killing that which is disordered, of maddening the brain by wine, beer, and brandy, without stint—thus quenching the intellect in its last expiring rays, forestalling the unconsciousness of death, and dismissing the patient drunken from the world! This is but a *reaction*, we are told, from the opposite extreme of ten, thirty, or forty years ago—an equivalent of slaughter in compensation for the countless thousands who were then bled, purged, and starved to death. In this balance of distinction the result is one of small value to the statistician. To the Physician it is a double shame."

Two of the Medical Societies have held their annual meetings this week. At the Pathological Society, on Tuesday, the officers for the year were elected: a list may be found in another column. The election of Dr. Copland was unexpected, as Dr. Bence Jones had been proposed by the Council. It seems to have been felt that Dr. Copland's seniority, his former position as Treasurer of the Society, and his literary claims, could not be overlooked. At the Obstetrical Society, on Wednesday, Dr. Tyler Smith was elected President, in Dr. Rigby's place. He paid a very graceful tribute to the memory of his predecessor, whose remains had been consigned to the tomb that morning; giving a short summary of his history, and of his Professional labours, and alluding to the simplicity and ingenuousness of his character.

The Profession will hear with universal satisfaction that Dr. Stokes is to be gazetted Physician in Ordinary in Ireland to the Queen, in the place of the late Sir Henry Marsh. The Medical appointments of the Court for many years past have been quite unexceptionable, and this is another instance of the "right man in the right place." We also hear with pleasure that Mr. Wilde has been appointed one of the Commissioners for taking the ensuing Census in Ireland. We all know how well he fulfilled his share of the duty on the two previous investigations in 1841 and 1851.

The *Law Times*, a weekly journal of "the Law and Lawyers," of the 29th ult., contains the following remarks, by T. W. Saunders, Esq., Barrister-at-Law, upon the Medical Act of 1858, in the department of "Notes of New Decisions:"—"There appears to be a singular fatality attending all prosecutions under the Medical Practitioners Act, 21 and 22 Vict. cap. xc. We know of no instance in which any information against a supposed unauthorised Practitioner has been successful, and certainly every appeal to the Superior Courts, against decisions of Justices at Petty Sessions, has resulted in favour of the defendant. The statute must not on this account be charged with shortcomings. It accomplishes all that it was designed to accomplish; but the truth is, more has often been expected from it

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than ever was intended, and it has in many instances been used as an engine for the gratification of personal and private ill-feeling." A vigorous effort must be made during the next Session of Parliament to amend this very faulty Act. At present it is the Magna Charta of the Quacks.

The Coroners appear to have been unusually active. We learn that the inquests held in the Eastern division of Middlesex were more than doubled during the last week. Three main causes of sudden or suspicious death are prevalent during intense cold. Disease of the heart is one. When this organ becomes impaired, in persons of advanced life, intense cold evidently tends to arrest its work for ever. Accidents from fire are unusually rife, caused in great part by the intemperance prevalent at this season. A peculiarly distressing case was investigated by Dr. Challice, Deputy Coroner for Eastern Middlesex, in which three fine children were burnt to death at Whitechapel, although the parents, who slept in the next room, had ample time for escape and time to call some lodgers in an upper floor; but they were so confused that they did not think of the children who slept in the next room! A third cause of death, peculiarly aggravated during severe weather, is the overlying of infants, or suffocation under the bed-clothes, a mode of death which is frightfully prevalent, by accident or design.

The newspapers overflow with accounts of the extremely low temperatures observed at various places during the recent frost. On Christmas-day the thermometer marked 5° below zero; — 5 at Dymock, Gloucestershire, and Cheadle, Staffordshire; it marked — 3 at Crubbwell; — 6 at Ravendale, Grimsby, and so low as — 15 at Blake Hall, Ninfield. Mr. E. J. Lowe, dating from the Observatory, Beeston, records a minimum temperature of — 13 on the same day. By the sea-side the temperature has been higher; the air, instead of passing over the frozen water, being warmed by the ocean, has not fallen below 40°. At Scarborough on Christmas-day the minimum cold was 16° F. At Torquay on the same day, 33°; at Greenwich, 8°.

With the records of cold, there appear the usual frightful accounts of destitution and suffering at the East-end of London. Large as the sums are that are subscribed by the charitable, they scarcely alleviate the present misery, while it is doubtful whether intermittent and occasional contributions can do much towards the only real remedy for distress —the elevation of the whole working class morally and physically.

Pathological Society of London.—The following is a list of the Officers and Council of the Society elected for the year 1861: — *President*, Dr. Copland, F.R.S. *Vice-Presidents*, G. H. Barlow, M.D.; Sir John Liddell, M.D., C.B.; T. Watson, M.D., F.R.S.; C. J. B. Williams, M.D., F.R.S.; John Birkett, Esq.; James Dixon, Esq.; William Fergusson, Esq.; Alexander Shaw, Esq. *Treasurer*, Richard Quain, M.D. *Council*, A. W. Barclay, M.D.; Thomas Barker, M.D.; W. D. Chowne, M.D.; W. O. Markham, M.D.; Charles Murchison, M.D.; J. W. Ogle, M.D.; T. B. Peacock, M.D.; H. Hyde Salter, M.D.; E. C. Seaton, M.D.; R. H. Semple, M.D.; Thomas Ballard, Esq.; W. White Cooper, Esq.; J. G. Forbes, Esq.; Jabez Hogg, Esq.; J. C. Langmore, Esq.; Henry Lee, Esq.; John Marshall, Esq., F.R.S.; J. J. Purnell, Esq.; John Pyle, Esq.; S. J. A. Salter, Esq. *Honorary Secretaries*, J. S. Bristowe, M.D., and Henry Thompson, Esq.

REVIEWS.

Clinical Lectures. By Robert Bentley Todd, M.D., F.R.S., late Consulting Physician to King's College Hospital, etc. Second Edition. Edited by Lionel S. Beale, M.B., F.R.S., Physician to King's College Hospital, etc. Pp. 912. London. 1861.

It will be generally agreed that no one could be better qualified for the task of editing Dr. Todd's Clinical Lectures than his pupil and successor, Dr. Beale—one of the most able and successful of that energetic school of working practitioners of which Dr. Todd was the founder. We only regret to find that the Editor has been so sparing in his contributions to the volume. We should have been pleased to see some few personal reminiscences, some short *éloge* or memoir, some opinion on the soundness of the doctrines with which the lamented author's name has of late been familiarly associated, or some commentary on the gradual rise and development of those doctrines in the author's mind. We should have thought it difficult to refrain from doing what Professor Beale, if anyone, ought to have been able to do so well. But there is nothing of the sort. And not only so, but the order in which the Lectures appeared has been reversed; and those "On Certain Acute Diseases," published just before their author's decease, are put first, "because they explain more fully Dr. Todd's views on the principles of Medicine." Two Lectures, one "On the Mode of Taking Cases," another "On the Diagnosis of Disease," are now published for the first time. We do not find a record of the dates at which the lectures were delivered, or at which many of the recorded cases were treated. Yet this would have formed an important feature of the book in the eyes of anyone who desired (as we all must desire) to trace the steps by which Dr. Todd reached the convictions enunciated in his latest publication. That there was a gradual change in his opinions and practice is obvious. For the lecture "On the Diagnosis of Disease," so strangely intermixed by the Editor with the very latest lectures at the beginning of the book, differs as much from these as one of Raphael's earliest pictures, after the style of Perugino, does from his Transfiguration. In the one the style is formal, and smacks of the schools; in the other natural, and exhibits the very soul of the man.

In the Lecture on Diagnosis we find mention of "antiphlogistic" treatment; of which we are told—not that it is "unnecessary (to say the least) for the cure of acute internal inflammations," and that the "supposed necessity for such treatment rested upon an untenable hypothesis respecting the nature of inflammation," as we are told in the observations on acute disease in 1859; but—that "local bleeding and small doses of tartarised antimony speedily subdued the irritation" of a phthisical lung in which pneumonia was present; we find "an abundant flow of blood" accused of deranging the nutrition of the gray matter of the brain; we find "mercurial treatment" described as greatly benefiting an irritative disease of the brain (pp. 34, 35, and 848); we find besides, in another Lecture, that the author "used to bleed largely and purge freely" in gout (p. 593).

That there was a change, and that this change was inevitable under the admirable mode of clinical study pursued by Dr. Todd; that he did immense service in helping to rout one of the surviving vestiges of "John-Hunterism" so dear to his neighbours in Lincoln's-inn-fields; that he discarded the fallacy that inflammation *per se* is an evidence of "increased action;" that he was one of the first to enunciate the necessity for food under the wasting processes even of acute disease; and that he taught a large number of men to investigate the whole natural history of disease carefully, minutely, and doubtingly,—assuming nothing that would not stand the test of present experience,—are facts which we hold to be indisputable. That he pushed his favourite views to an extreme is no more than most men do who have much truth on their side, and much power, with the disposition to use that power. And if some of Dr. Todd's disciples imitate their master's peculiarities, without the restraints which his judgment would have imposed upon himself, it is one of the evils that cannot be helped. There always will be imitators; and, on the whole, beef-tea and brandy are less dangerous to society than the universal use of the lancet.

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But, even including the latest Lectures, with their too unreserved recommendation of "alcoholic food," and that too extreme denunciation of all antiphlogistic treatment, the Medical Practitioner will find every page of this volume worthy of his attentive perusal. He will soon perceive that it is the work of a man who incessantly appealed to matter of fact; who was always observing and questioning Nature; who endeavoured to teach others to learn as he had learned himself, and who was filled with a love for his subject and a conscientious sense of the responsibilities of a teacher. Beginning with the Lectures on Clinical Study, on Paralysis, and the other forms of brain and nerve disease, which are depicted with living force and fulness; then taking those on urinary diseases, on the various forms of kidney disease, dropsy, and gout; then coming to those on acute diseases, as rheumatic fever, continued fever, erysipelas, œdema glottidis, pyæmia, and pneumonia, the reader will have gained a great insight into the analysis of disease and the principles of rational treatment; and if he cannot agree with the author (as we confess we cannot) in all his conclusions respecting alcohol, he yet will have learned the value of a soothing and supporting, in contradistinction to the "*heroic*" system of practice, and will agree that Dr. Todd, despite these *maculæ*, is deservedly ranked among the great Physicians of the age.

On the Theory of the Ophthalmoscope. By George Rainy, M.D., Assistant-Surgeon to the Glasgow Eye Infirmary. 8vo. Pp. 66, with 15 Diagrams. London: 1860.

Exactly as any one may make many and curious observations by means of a simple or compound microscope, without knowing the optical properties of these instruments further than that they magnify, so may the Medical Practitioner, by converting for the time the eye of his patient into either a simple microscope, or into the object-glass, so to speak, of a compound microscope, discern many things of importance for him to know, although the scientific principles of what he is pleased to call an "Ophthalmoscope" are almost entirely unknown to him. If he is at all of an ingenious turn of mind, and if he asks himself, How does this instrument enable me to see the retina, the choroid, and the whole interior of my patient's eye?—or if the same question is put to him by any intelligent by-stander, he will feel himself called upon to turn his attention to the optical principles, by an application of which so beautiful and useful an invention has been put into his hands. In such circumstances, recourse to elementary works on optics will be of little avail, the subject of illuminating the eye and discerning a magnified image of its fundus being a new one, dating no further back than the publication of Helmholtz's pamphlet, in 1852. This deficiency the inquirer will find amply supplied by the short treatise now before us, the design of which is thus explained by the author:—

"After the observer has acquired the power of illuminating the patient's eye, he will find that a great many circumstances have to be attended to, in order that he may at once illuminate a sufficiently large portion of the patient's retina, that he may see the objects so illuminated distinctly, and that he may be able to interpret what he sees correctly. A knowledge of these circumstances may, no doubt, be arrived at empirically, if one has extensive opportunities of making ophthalmoscopic examinations of different healthy and diseased eyes; but it is always of importance—if not absolutely necessary—that those who make use of optical instruments should have some knowledge of the leading theoretical principles which have a bearing on their construction and application to the purposes for which they are employed.

"This remark applies very specially to the use of the ophthalmoscope; because, while the optical relations are somewhat complicated, the employment of adjustive mechanism is generally inconvenient, from the circumstance that the eye of the patient, which is often unsteady, forms part of the instrument. Under these circumstances, it will be found that many sources of difficulty and error may be obviated, not only by a knowledge of optical principles in the abstract, but by a reference to their practical application to the case in hand.

"The desideratum last mentioned is the one most frequently found wanting; for it is not uncommon for those who have some knowledge of the elementary principles of optics to fall into considerable perplexity when called upon for the first time to apply that knowledge to a new mode of investigation, involving the use of instruments, natural and artificial, the optical properties of which have not been studied in their relation to the peculiar circumstances under which the investigation is conducted."—P. 7.

The heads under which Dr. Rainy considers his subject are—1. Preliminary observations and definition of terms; 2. Modes of illuminating the fundus oculi; 3. Modes of viewing objects within the eye; 4. Modes of simultaneously fulfilling the conditions of illumination and perception of objects within the eye; 5. Interpretation of phenomena observed. All of these topics are handled with much care and minuteness. The diagrams are extremely distinct. In order to refer to them the more readily, we would recommend the reader to separate them from the text, so as to have them constantly before him during the perusal of the work.

On the whole, we consider Dr. Rainy's tract as extremely creditable, both to himself and to the Ophthalmological School with which he has recently become connected. Without danger of suffering by the competition, it may take its place by the side of the treatises, so well known to our continental brethren, of Ruete, Van Trigt, Stellwag von Carion, Zehender, Liebreich, and Giraud-Teulon.

On Diphtheria. By E. H. Greenhow, M.D., F.R.C.P.L., etc. etc. 8vo. Pp. 274. London: 1860.

Dr. Greenhow, in the Spring of 1859, made (for the Privy Council) an inquiry into the causes, symptoms, and treatment of Diphtheria; and chiefly upon the details thus obtained, as well as his own experience, is his book founded. Our readers will find a very large amount of information in the twelve chapters of which the volume is made up. Perhaps, in the present state of our knowledge on the subject of this obscurely understood disease, little more can be said beyond what may be here found written down. The disease, we find, has long travelled about over the face of the world. It may be new to us in modern days; but our forefathers knew it. It is truly an epidemic disease. Dr. Greenhow traces its action in various countries during the 16th, 17th, and 18th centuries. In his third chapter he gives Bretonneau's and Louis' accounts of Diphtheria, and brings us up to the period of the epidemic which has manifested itself among us in this country. The fourth chapter teaches that, although the disease generally appears as a wide-spread epidemic, yet that it also occurs in a sporadic form; and that in this form it has probably never been absent from this country. The fifth chapter is occupied in demonstrating that Diphtheria and Scarlet-fever are not, as some would have it, identical diseases.

Several disorders have seemed to be unusually frequent since diphtheria has been among us, viz., sore-throat, scarlet and typhoid fevers, and ague, carbuncles, and erysipelas. Cattle epidemics, or as the Doctor rather awkwardly styles them, "Brutal Diseases," have also been very prevalent during this period. No particular locality has been especially visited by the disease—high and low, moist and dry, districts have each been its quarters, but where dampness prevails, there appears to be its more favoured settlement. It has yet to be shown how far effluvia from decomposing organic matter assist or invite its advances. Youthful age has a particular susceptibility to its attacks. Between two and twelve is the chief period of life which it falls upon. Dr. Greenhow has no doubt as to the communicability of the disease, though he is not clear as to how the disease is passed from one body to another. The latter part of the work is occupied by a very full account—freely illustrated by cases—of the symptoms, the morbid anatomy, and the treatment of this obscure malady. Into these points we, of course, cannot follow our author here. He has, however, we may say, done full justice to these topics, and has said, perhaps, pretty nearly all that can be usefully said about them in a treatise of this kind. We are glad to see that he repudiates all rough cauterisation of diphtheritic sore throats, and should have been glad if he had dilated more on the subject of tracheotomy in the croupy form of the disease. The question as to the value of this operation in diphtheria has certainly yet to be decided. The operation has probably been too unfavourably regarded in this country, on account of the usual want of success which has attended it. In most

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cases such a dread or objection is felt at its performance, that the operation is deferred until its performance can scarcely be expected to bring good results. We never could understand why such great objections should be felt to the earlier performance of an operation in itself so little dangerous.

The Principles of Physiology applied to the Preservation of Health, etc. By ANDREW COMBE, M.D., etc. etc. Fifteenth Edition. Edited, etc. by Dr. COXE. Pp. 336.

THIS well-known work has passed quite beyond the sphere of criticism. It has established itself in the wide, wide world; and its reputation is still upon the increase. The last edition, which was published in the author's lifetime, appeared in the year 1844; but we are told by Dr. Coxe that Combe continued to enlarge and amend it up to the time of his death in 1847. Shortly before he died he expressed a desire that Dr. Coxe should undertake the editing of this work. Dr. Coxe, consequently, in 1852, published a revised edition, which has been so well received, that the 5000 copies composing it have been long exhausted. Another edition is, therefore, called for; and this is the one which now appears, "with whatever additions and alterations the recent progress of Science has rendered necessary." The additions and alterations seem, indeed (as we might suppose), to have been very extensive. It appears that 38,000 copies of this treatise have been sold in Edinburgh; and that probably about 100,000 copies have been printed and circulated.

Anatomy of the Arteries of the Human Body, Descriptive and Surgical; with the Anatomy of the Heart. By Dr. POWER. Illustrated by B. W. RICHARDSON, Esq., F.R.C.S.I. Duodecimo. Pp. 374.

THE object of this work is to assist the student while engaged in the study of anatomy, and also to give him practical information which will be of service to him when he has entered into practice.

As a student's manual, we should pronounce it as the most perfect work of the kind we possess. The illustrations are particularly excellent, and have been, we are told, executed by Mr. Richardson, late Demonstrator of Anatomy in the Carmichael School of Medicine, from drawings made expressly for the book. The methods of tying the arteries are also given under their proper heads. We think the author would have done well to have devoted a chapter to the microscopic anatomical structure of the arteries, veins, etc; a clear understanding of the tissues which form the coats of the vessels being clearly indispensable to a proper comprehension both of their diseases, and also of the effects of the operations performed upon them. This is the only defect we have met with in the work. To the student of Surgery, with his scalpel in hand, it will be found of the greatest assistance.

The Medical Vocabulary, containing a concise Explanation of the Terms used in Medicine and its Accessory Sciences. By ROBERT FOWLER, M.D. 8vo. Pp. 365. London: 1860.

As the author of this work states in his preface, it at first sight appears a superfluity to have added another to the various Medical Dictionaries already in use; but when it is taken into consideration that the requirements of the various Medical Boards, especially those for preliminary education, are much more severe than they were a few years ago, and, moreover, that the science of Medicine has vastly advanced during the same period, and therefore of necessity scientific nomenclature has become increased in proportion, the utility of a work like the present—which gives a fair explanation of every term used in Medicine and its allied sciences—must be obvious to everyone.

We find on examining it, that a large amount of information is furnished in a small space. To the Medical man in practice the work will be found useful; but it is for the student of Medicine, in particular, that this Dictionary is intended, and we strongly advise everyone to get a copy of it who cannot obtain the more expensive and comprehensive work of Dr. Mayne.

The Physicians', Surgeons', and General Practitioners' Visiting List, etc., for 1861.

MESSRS. SMITH and Co. have now brought out the fifteenth annual edition of this very useful Diary and Book of Engagements. It has been made more portable than before, and has a neater appearance. All who have used it know its value, and those who have not used it before should begin now.

The Dentists' Handy-book, and Appointments Register. London: 1861.

THIS is the first year of publication of this diary, which contains a great deal of useful information for Dentists, and is a very neat register for appointments throughout the year.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

DISCUSSION ON THE USE OF PESSARIES.

THE subject of the treatment of uterine affections by means of mechanical appliances having come before the New York Academy of Medicine, Dr. Peaslee observed that there were three points to be considered: 1. Are such applications ever required? 2. In what cases are they called for? and, 3. Which are the best instruments? 1st. The discussion must be confined to instruments applied *per vaginam*; for although those termed utero-abdominal supporters may support the muscles of the abdomen, they can never either reduce a displaced uterus, or retain it in place if reduced. As to the desirableness of using the pessary, Dr. Peaslee would as soon dispense with the use of splints in treating fractures, as he would dispense with it in treating displacements of the uterus. 2nd. In some cases of prolapsus in the first degree, entire relief is instantaneously obtained by its application. In inversion of the uterus, it should not be used, as a general rule, until re-position has been completely effected. "Do not misunderstand me to say that all cases of either of these kinds of displacement require its use. I only say that cases occur of each which I could not conscientiously treat without it. There are cases which give no symptoms at all, and therefore require no treatment. Some of these, however, finally produce serious constitutional symptoms; and for this reason, at length require treatment. Some also produce sterility. There are many cases, also, which may be treated by astringents in the recumbent posture, others still in which the displacement is due to inflammation and congestion of the uterus. Still, there remains a class of cases which I could not consider myself justified as treating without the aid of the pessary. . . . . It is objected to pessaries, that they distend the upper extremity of the vagina, and thus serve to perpetuate any relaxation that may previously exist there. The instrument should, however, at first be as small as will answer the purpose, and another, still smaller, should be substituted as soon as the latter will accomplish the object; and so on until no instrument is required. And here I should remark, that we are generally inclined to apply unnecessarily large instruments to begin with. Pessaries are said to produce inflammation of the vagina and uterus, a result which I have never seen when they have been applied in a proper manner, and under proper circumstances. I should make it a rule never to apply them as long as there is any inflammation or congestion of vagina, uterus, or ovaries." 3rd. As to the form of the pessary, each kind may have its advantages. Dr. Meigs makes a very general use of the *globe pessary*: but Dr. Peaslee restricts it more especially to the cases in which the uterus becomes fixed, whether by adhesion or otherwise. "In cases of this kind, and especially of prolapsus in the second degree, with immobility of the uterus, I have found the *globe pessary* of great service. If one be introduced into the vagina so as to protrude slightly, it will in some cases, within twenty-four hours, become enclosed in the canal, and thus elevate the uterus to the normal position. The *stem-pessary* I should restrict to the treatment of prolapsus where the uterus is forced downwards by either an intra-uterine or extra-uterine tumour, and in which no other instrument would be found sufficient to support the organ

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The *annular* or *ring-pessary* is found useful in a great diversity of cases. It may be made with a variety of substances, but I prefer that made with a watch-spring covered by gutta-percha, or that made of pure tin. The former can be used of a circular or elliptical form, though it cannot be bent in its original plane. The latter being flexible, and yet sufficiently firm, can be applied in a great variety of forms and thus be adapted to a great diversity of cases." Dr. Peaslee next observes that, although a pessary may entirely remove the symptoms in many cases of anterior and posterior displacement, the radical treatment of these (which is, however, only called for in very few cases,) can only be accomplished by the uterine sound; and he thus describes a simple instrument which he has found very useful in anteflexion:—"It consists of a tube, $\frac{3}{16}$ of an inch in diameter, and about 3 inches long, passing through two hollow bulbs, all of pure silver. The uppermost of these bulbs is about $\frac{3}{4}$ of an inch in diameter, and the part above it is the stem, or intra-uterine, portion of the instrument. The other bulb is of similar construction and about 1 inch in diameter, placed at the upper end of the tube, about $\frac{3}{4}$ of an inch from the above-mentioned. The instrument is introduced upon a staff, which is then withdrawn. When introduced, the os uteri rests upon the upper bulb, while the lower one rests upon the posterior wall of the vagina. It might be supposed, that so simple an instrument would fall out of the canal, but this is not found to be the case in practice, the walls of the vagina closing around the lower bulb and between the two bulbs. It can be used only in cases in which the vagina is still narrow and retains its tonicity; and in these conditions it may also answer a good purpose in retroflexion. I have never seen any severe symptoms produced by the use of this instrument, and I have had patients wear it for four months.

Dr. Marion Sims agreed with Dr. Peaslee in his appreciation of the value of pessaries, believing the tin annular one devised by himself to be the best, as by its flexibility it admits of adaptation to a great variety of cases. Each case should be made a study in itself, and have an instrument accurately adapted to its indications.

Dr. Gardner was quite at issue with the preceding speakers. First, he believes that the utero-abdominal supporters are of real efficacy, by taking off the weight of the pendulous abdomen and superincumbent viscera, and thus allowing the uterus to resume its normal position; secondly, he totally disapproves of the use of the pessary, as both theoretically and practically wrong. It is an attempt to relieve the mere effect without attacking the cause, whether this consist in a laxity of the uterine ligaments or the uterine walls, or in an abnormal increase of the weight of the uterus itself. Practically, pessaries act frequently as irritating foreign bodies, giving rise to leucorrhœa, abortion, hæmorrhage, constipation, and sometimes to more serious evils, as ulcerations. Considered as harmless, they are inserted, and the patient, unprovided with proper cautions, is perhaps lost sight of. Dr. Gardner cited several cases in proof of these statements, in one of which the pessary had led to complete dilatation of the os uteri and its own impaction within its lips. As to the *stem pessary* employed by Simpson, Valleix, and others in deviations of the uterus, the best modification of which is that of Dr. Peaslee, Dr. Gardner cannot but regard it as an exploded instrument. "The uterine deviation is either acute or chronic. When acute, the result of any accident, the uterine sound should be introduced into the cavity, or one finger into the vagina and another into the rectum, according to its character, and then, it being easily restored to its normal position, with a few days' rest the patient is cured. But if it is chronic, it may have been the neglected result of accident, or the woman married early, before the organ had attained its full dimensions, and it had been displaced by vigorous coition; and then there has been inflammation with more or less adhesion, even to a complete binding down of the organ to the parietes of the pelvis; and then the result of the disease is unalterable. If the sound raises it a bit, it falls back again and again as often as repeated, and the introduction and wear of the stem but makes disease where none exists, and the organ returns to its position as soon as the support is removed. In other acute cases we have a flexion or version, the result not of accident but of disease. The uterus has undergone *fatty degeneration* at the point where it has given way; and although it may be forcibly lifted up for weeks or months, it necessarily returns to its position as soon as the support is removed. Flexions of the womb are of little or no importance save when they are associated with inflammation in its various forms. This we may cure, and this is what we should treat, and afterwards, if there has been no actual disorganisation the uterus may resume its normal situation. . . . I never see any cases of uncomplicated flexion. There are many women, of whom there was never a suspicion that there was any flexion of the uterus, till it was revealed at a post-mortem. It is not a disease, but a result of disease, and it often exists for many years unsuspected, and only becoming discovered when the patient goes to a Physician for some complication. The possessor of this malformation is unquestionably predisposed to local disturbances, to inflammation of the uterus, etc., and the Physician who examines her, imagines that in discovering a chronic flexion he has found the actual source of all the difficulty. No such thing,—he has found only a 'complication,' aggravated by the abnormal situation of the organ. Now, what is the treatment? Simple enough. Treat the complication which alone is curable; and as soon as it is relieved, the flexion still remaining, the patient is as well as she can be. I never see any but complicated cases." Adverse as he is to pessaries in general, Dr. Gardner employs one with a small stem, which enters the cervix, not the cavity, of the uterus, for the cure of strictures of the cervix.

Dr. Sims, while surprised at the tenour of Dr. Gardner's remarks on pessaries, endorsed to some extent his statements concerning abdominal supporters, having frequently known these to afford great relief, although they have exerted no influence on the malposition itself. As to the intra-uterine stem-pessary he has had to give it up, owing to the mischievous results which have been occasioned by its becoming displaced. While there are cases of malposition in which mechanical means are not applicable, there are also a great number more or less amenable to treatment, and Dr. Sims related several cases in which by an adaptation of his *ring pessary*, and retaining it *in situ* during coition, and until quickening, he has been enabled to secure impregnation and avert abortion. "Dr. Gardner states that he has frequently found inflammation result from the use of pessaries. The reason is simply this, the Medical Profession has rather extravagant ideas of the capacity of the vagina; nineteen out of twenty selecting at the beginning instruments that are too large. In the great majority of cases they hardly ever require an instrument that is more than $2\frac{1}{4}$ inches in diameter, sometimes $2\frac{3}{4}$, very rarely 3 and sometimes even down to 2. It requires a great deal of judgment in the application of the instrument to the peculiarities of the case. If it be too small, it will not afford the necessary support; and if too large it will unavoidably produce mischief. I have over and over again seen the *cul-de-sac* ulcerated almost to the peritoneal cavity, the neck of the bladder almost severed, and other parts of the vagina ulcerated by the pressure of too large instruments. I think that a great feature in regard to the use of pessaries, is to make them so that they will not interfere with coition, and I want here to obtain for the distinguished Dr. Hodge, of Philadelphia, the merit of first demonstrating the practicability of this by the use of his particular pessary, and next for the learned Dr. Meigs, for the use of his ring pessary. I take to myself no credit for the modification of the Hodge Pessary or the Meigs Ring. I only claim to have cheapened the instrument. One of Hodge's pessaries costing from 5 to 7 dollars, one of Meigs gutta-percha rings costing a dollar, while the block tin instrument costs about 18 cents.; and can be moulded to the desired shape, to fit the peculiarity of the individual case, and is as inocuous as gold itself. One other point. The patient should always be instructed in the use of the instrument: she should be made as familiar with its application and removal as with putting on her glove; and I respectfully insist that no woman should ever be sent off to a distance to wear a pessary for an indefinite time. I have seen great mischief result from this, and I do most heartily protest against it."—*American Medical Times*, Nos. 22, 23.

DEATH OF A FRENCH SURGEON FROM DIPHTHERITE.—Another of these occurrences, which have been by no means unfrequent in France, has taken place in the person of M. Gendron, a Practitioner of great repute at Château-du-Loir, who contracted diphtherite after the performance of tracheotomy on a child the subject of croup.

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GENERAL CORRESPONDENCE.

BETHLEHEM ROYAL HOSPITAL.

Letter from Dr. Hood.

[To the Editor of the Medical Times and Gazette.]

Sir,—The managers of a public institution would display an undue sensitiveness if they expressed dissatisfaction at a public criticism on their management; but, when assertions are made without any regard to truth, which involve the honour and character of the persons engaged in the various departments, an exposure of the deceit and falsehood may be permitted.

In the extract from the *American Medical Times* (No. 22) which you have thought desirable to copy into your Journal of last week, some severe strictures are made upon the management of this Hospital. A glance at the original letter will show that the whole sting is directed towards the treatment of that class of criminal lunatics who, owing to their murderous antecedents, or homicidal disposition, the Government very properly hesitate to discharge again upon the world; but the opinions of the correspondent will be deprived of much weight when I state that, not only are the assertions entirely false in spirit, and, to a great extent, false in word, but that we have strong presumptive evidence that the writer has never visited the Hospital, has never seen the friend in compassion for whose sad lot he makes such bold and reckless charges, and that the subject-matter of the letter was supplied to the correspondent by a criminal lunatic now in the Hospital, and by him sent to an agent in New York for insertion; this round-about course being adopted because the English Press has easy means of detecting falsehood and exposing a traducer.

The rules of the Hospital are sanctioned by the approval of the Secretary of State and the Commissioners in Lunacy, and both the public and the members of the Medical Profession (who frequently visit the wards) are capable of deciding how much "gape-seed" is sown, and whether the Governors have succeeded in making the Hospital a great and useful public charity, or a "fashionable show-place." But the gross falsehood respecting the coroners' inquests demands a more direct refutation. The Coroner for Southwark writes to me on the subject, "With regard to that part of the statement which applies to the holding of coroners' inquests, the fact is, that coroners' inquests are not held on all who die within the Hospital; the Act of Parliament which relates to them requires a statement of the circumstances in each case to be submitted by the authorities of the Hospital to the Coroner, who is to form his own opinion from such statement, whether an inquest is necessary or not; nor is it a fact, that the officers and officials of the Hospital alone are examined. The coroner examines any person that either himself or the jury may think necessary, and on more than one occasion recently, patients have been examined by the coroner and jury with regard to the causes of death of their fellow-patients. The relations and friends of a deceased patient are also examined whenever they are known and their attendance can be procured."

Complaints made in an open manner, and by responsible agents, demand courtesy and attention from those who act for important public institutions; but wilfully false statements, made by obscure and ignorant individuals, if not passed by with silent contempt, merit only a distinct denial.

I am, &c.

W. Charles Hood, M.D., Resident Physician.

Bethlehem Hospital, December 31.

[We trust that this letter will teach American Editors to be more careful in the selection of English correspondents. Had we not copied part of the letter of which Dr. Hood so justly complains, American readers might have believed all the statements of the writer in the *American Medical Times*. We feel sure that our transatlantic contemporary will be ready to make the *amende honorable*, and to accept our assurance, after a personal inspection, that all the arrangements of Bethlehem Hospital reflect the greatest credit on the Resident Physician—who has done more, perhaps, than any other man to secure a proper State provision for Criminal Lunatics.—Ed.]

A DEATH-BED WILL.

Letter from Mr. W. R. Wilde.

[To the Editor of the Medical Times and Gazette.]

Sir,—It was with some surprise I read the report of the case of Potts v. Potts, and others, tried before Sir C. Cresswell on the 20th of December last, as given in your number of the 29th inst. Everybody, as well as the doctor and the lawyer, knows that a death-bed testamentary disposition of property is just as good as if it had been made ten years before, provided the testator is then of sound and disposing mind and understanding, and not unduly influenced, and that the document is properly attested, etc. As all this seems to have been effected in the case transcribed to your columns, I have only to observe on one particular, that is, the fact of the will having been drawn by a Medical man. In this country death-bed wills have been very frequently drawn up by clergymen, and many of these have been subsequently broken in the Court of Probate—the learned judge who presides therein having expressed on many occasions a very strong opinion respecting the interference of parties either unconnected with the testator or not sent for professionally, like lawyers and attorneys. And it is hoped that these expressions of Judge Keating, as well as the decisions recently given in some remarkable cases, will have the desired effect. I am, however, happy to state that the Medical men of this country have kept aloof from such matters, either as suggestors of wills, drawers of wills, or even witnesses of wills. In all such cases we direct an attorney, and the friends and relatives of the sick person to be sent for. This saves a world of trouble to the Medical man, keeps him out of family squabbles, prevents an exhibition in the witness-box, and, in my mind, upholds a high tone of Medical ethics. I have no personal interest in the case you have published, but I have a professional interest in the circumstance related of a Medical man drawing up a will, especially in the absence of the immediate relatives of the deceased. In your report of the case there is a slight omission of what appeared in the morning papers, which I think should be known. Mr. Day, the original Medical attendant, "whispered in his [Dr. Budd's] ear [when drawing the will]—There is a report that they are not married." The doctor then changed the lady's name from Potts to Ratty. With this exception, I do not find the case differing in any respects from that published.

I am, &c.

Dublin, December 31, 1860. W. R. Wilde.

ON WORKHOUSE WARDS FOR INCURABLES.

Letter from Dr. Beddoe.

[To the Editor of the Medical Times and Gazette.]

Sir,—I rejoice to see that by the letters and articles which have of late appeared in your columns, and well as in some of the leading non-medical journals, the attention of the public is being called to the desirability of establishing Infirmary Wards in Workhouses, for persons afflicted with incurable chronic diseases.

The principal arguments for the adoption of this course have already been stated; but as it is desirable, at this season, to press it upon the attention of the benevolent public, and more particularly on the members of our own philanthropic profession, I venture to trouble you with a few desultory remarks.

The establishment of such wards as have been proposed could, in most of the existing workhouses, be effected at a very trifling cost. Empty rooms are happily to be found in almost all, and the special fittings would, it is hoped, be supplied by private liberality.

It is doubtful whether any notable increase in the poor-law expenditure would follow the adoption of the plan. Most of those unfortunates who would be attracted from without by the advantages of the sick wards are already, under the present system, in the receipt of out-door relief. At all events, it is the public that pays for their maintenance, in one way or another. In their case the nursing would not only be done better, but with great economy of hands. How often do we see some woman, whose exertions, if she

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could use them freely, might suffice to maintain both herself and an invalid relative, kept at home, and almost debarred from profitable employment, in order that she may yield that attendance and assistance which in a well-regulated Hospital, or in one of the proposed sick-wards, might be given more efficiently in one-tenth of the time and with one-half the labour. And thus, in some instances, are the healthy and able-bodied pauperised with the sick.

A somewhat similar argument applies to the Medical attendance on these incurables, looked at from a merely professional point of view, and without reference to the advantage of the patient. This plan would save a vast deal of the time and labour now gratuitously bestowed by so many of our profession in visiting the poor, in tracking them out in their garrets and hovels, in ordering and counselling measures that cannot or will not be carried out.

How often is the health of a whole family, dwelling closely-packed in one or two small rooms, grievously if not permanently injured by the presence among them of one such incurable invalid. In many such rooms ventilation without draughts is impossible, and, say what we will, the windows will be shut down as soon as our backs are turned, and the children forced to breathe the foul and heated atmosphere, because the draught might make the consumptive father or mother to cough.

Looking at the proposal from this side, I can see but one serious objection to it. It may be said that, by offering a comfortable home in the workhouse, instead of an uncomfortable one, to the indigent and incurable invalid, we run the risk of further weakening the ties of natural affection by diminishing the burden and responsibilities of their relations, and of holding out a premium to that improvidence which is the vice of the lower classes in England perhaps more than in any other country.

I am not going to enter into any discussion as to this anticipated objection; but will only say it has, I conceive, little more weight in this case than it has when urged against the establishment of any public provision for the poor; and that in the stage of civilisation in which we are now placed we are almost compelled to disregard it. There is no fear, however, of our workhouse wards being made so temptingly luxurious as to entice many of those who could well keep out of them. And though I have been speaking of certain out-door paupers as likely to be attracted within the walls by the proposed regulations, their number would probably be small, compared with that of the unfortunates who find themselves already doomed without alternative to the workhouse as it is, and in alleviating the discomforts of whose condition we can hardly, directly or indirectly, be committing an offence against social polity.

I am, &c.

Clifton, December 24. JOHN BEDDOE, M.D.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

TUESDAY, JANUARY 1, 1861.

ANNUAL MEETING.

REPORT OF THE COUNCIL.

"In presenting to the members of the Pathological Society the Fifteenth Annual Report of its progress, the Council has the pleasing duty of congratulating them on the abundant evidence which exists of the continued and increasing prosperity of the Society.

"The number of its supporters steadily increases. Twenty-eight new members have joined during the past session, of whom six only are non-resident, making altogether 366, a total exceeding that of any previous period. The condition of the Society's finances is equally flourishing. The total receipts for the past year have amounted to £380 2s. 2d., of which £22 1s. 7d. have been realized by the sale of "Transactions," and £2 1s. 7d. by dividend on funded property, leaving as the amount of subscriptions the sum of £355 19s. 0d. Of this £27 6s. have been received as life subscriptions and as fees from non-resident members, which sum at least, will, in accordance with previous custom, be added to the Society's funded property. The total expenditure for the year amounts to £319 12s 4d., leaving a balance in the Treasurer's hands of £126 13s. 2d., in part for investment, and in part for the general purposes of the Society, to be carried forward to the account of the current year.

"The objects which the founders of the Pathological Society had in view, as well as other objects which have appeared to be worthy of attainment, in the growing experience and widened career of the Society, have, perhaps, never been more satisfactorily pursued than during the past session.

"Thus, there has been a full supply of specimens of an interesting character for exhibition at the Society. Fresh exhibitors, among more recently-joined members, have appeared at the meetings; and in this manner a different order of specimens, and frequently differing views, have, from time to time, been brought under discussion, with advantage to the members at large.

"Again, owing to the abundance of interesting pathological topics presented for consideration, long dissertations and reports have been as much as possible avoided. A laborious scrutiny, when necessary, has been applied by practised pathologists, to those specimens which have required further investigation; but the results of such labours have been prepared in as concise a form as possible; a mode of proceeding which has added greatly to the value of the "Transactions," while it has economised the time allotted to the exhibition of specimens and discussion at the meetings.

"The Council cannot close the Report without expressing its cordial approbation of the manner in which Dr. Ogle, who now retires after a service of four years from the post of Honorary Medical Secretary, has fulfilled the various duties which have devolved upon him in exercising the functions of that important office.

"Finally, to all the gentlemen who have devoted themselves to the interests of science, to the welfare of this Society, the Council, in common with each individual member, owes a heavy debt of obligation. And at the same time it confidently trusts that the coming session may be as successful as the past, through a continued exercise of the same zeal and talent in the important and productive field of pathological inquiry."

At the previous meeting on December 18, the following specimens were exhibited:—

Dr. GIBB exhibited a piece of

NECROSED CARTILAGE EXPECTORATED IN A CASE OF SYPHILITIC LARYNGITIS,

By a female, aged, 50, who had been under Mr. Hart's care for iritis, and, subsequently, syphilitic laryngitis, with the usual well-marked symptoms. She was examined with the laryngoscope by Dr. Gibb, who found the glottis much constricted from thickening, the movements of the arytenoid cartilages were wholly impeded, and the superior vocal cords were irregular and jagged from ulceration. With the severity of the general symptoms and condition of the throat, it became necessary to perform tracheotomy at once. This was done by Mr. Hart, assisted by Dr. Gibb, the same day, with decided relief. It was after the operation that two pieces of necrosed cartilage were expectorated. The patient died from pneumonia on the tenth day. The aryteno-glottidean ligaments on the left side were found much thickened, with some ecchymosis; the glottis was eroded, as well as the superior vocal cords; the thyroid and cricoid cartilages were in a state of caries and necrosis, and the arytenoid cartilages were wholly detached. This case was brought forward to show the value of the laryngoscope in determining an immediate resort to active measures for relief, although the patient's general condition was bad.

The PRESIDENT then exhibited

FOUR LARGE URINARY CALCULI REMOVED FROM THE URETHRA AND BLADDER.

The patient, a gentleman, aged 70, had suffered from urinary symptoms for fifty years. He had been a patient of Sir Everard Home, Sir Astley Cooper, and recently of Sir Benjamin Brodie. He had, however, been sufficiently well to

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lead an active life, until the last two years, when he began to suffer much more. He came under Mr. Fergusson's care two or three months ago, and was then much reduced, so that it was feared that he would die of exhaustion. He had many fistulæ in the perineum, through which the whole of his urine used to pass. He was said to have been suffering from stricture, but the urethra had not been examined. Mr. Fergusson, on attempting to pass an instrument, detected a large stone. He made an attempt to pass the instrument by the side of the calculus to the bladder, but was unable to do so. After a time, finding there was no relief obtained, and the patient was gradually getting worse, he determined to remove the stone from the urethra. He cut down into the urethra, behind the scrotum, and exposed the stone. It was much larger than he expected, and great difficulty was experienced in removing it. Having got rid of this calculus, Mr. Fergusson attempted to pass an instrument into the bladder, but the passage of the instrument was prevented by a second stone. He enlarged the wound and with great difficulty succeeded in removing it. On getting this away he discovered a third, after removing which he was enabled to pass an instrument into the bladder, and there detected a fourth. This he also removed: it was round and small. Although the operation had been the most protracted and difficult which had ever fallen to Mr. Fergusson's lot in lithotomy, yet the patient had made an excellent recovery.

RECURRENCE OF DISEASE IN THE ABDOMEN, AFTER REMOVAL OF TESTIS IN A YOUNG CHILD.

Mr. T. Holmes related the further history of a patient whose testis he had exhibited at a meeting of the Society last session. Some doubt was then entertained as to the nature of the disease, and Mr. Hulke and Mr. W. Adams were asked to report on the specimen. They supposed it was malignant, but did not form a decided opinion. The boy recovered well from the operation, and lived until November, 1860. He had been sinking for some time before his death, and suffered much from pain in the abdomen, in the iliac region, in which, on the same side as that on which the testis had been removed, was a large tumour. On opening the abdomen there was found a large tumour, which had pushed the intestine over to the other side. One-third of the tumour was formed by a cyst containing a yellowish, gelatinous fluid.

Mr. Wm. Adams narrated a case in which he had removed a diseased testis, weighing one pound and a-half; and at the same operation had slit up the inguinal canal, and removed part of the cord, which he found affected with the same disease, though not continuous with that of the testis. The patient had one year's good health, and then died from recurrence of the disease in the abdomen.

Dr. Tilt then showed a

CAST OF THE INTERIOR OF THE WOMB.

A lady, aged 26, consulted him a few weeks ago for ropy discharge from the vagina and dysmenorrhœa. These symptoms she dated from the time of her marriage, three years before. She said that she passed "fleshy substances." The specimen exhibited was the one passed at the last menstrual period. Some Pathologists, he said, as Dr. Oldham, considered that these casts were not the result of inflammatory action, but were produced indirectly from ovarian irritation. Dr. Tilt believed that antecedent symptoms of inflammation might generally be detected.

Mr. Wm. Adams then showed the body of a child in which there was a

DEFICIENCY OF THE ABDOMINAL PARIETES.

There was, in consequence of this defect, a protrusion of some of the viscera, but he had not yet made a dissection of the parts; there was varus of the right foot, and contraction of the great toe of the left foot. The child had lived eighteen hours.

Mr. Hutchinson showed specimens of

SECONDARY EPITHELIAL CANCER IN THE LUNGS.

The portions of lung shown had been removed from the body of an elderly woman who had died of cancer of the tongue. The base of the tongue and parts adjacent had been destroyed; and the glands under the jaw having been extensively involved, a large ulcerated opening had formed. This opening passed from the neck into the mouth, and, during life, she had been much troubled by the escape of her food through it. The progress of the case had been rapid, the patient having sank exhausted by the pain, discharge, etc., within nine months from the commencement of the cancer in the base of her tongue. As far as the tongue and submaxillary glands were concerned there was nothing unusual in the case; it exemplified the ordinary course of epithelial cancer. At the autopsy, however, the interesting fact was ascertained that secondary deposits of cancer existed in the lungs. There were found, as separate nodules, six or eight scattered in the upper lobes of each lung, and varying in size from a pea to a horse bean. On section they presented the appearance of being infiltrated into the tissue of the lung. On microscopic examination several of them showed in great abundance flat epithelial scales, and nested or compound cells exactly resembling the elements seen in the cervical lymphatics and the diseased parts of the tongue. In some of the masses only a few epithelial scales were seen, their structure consisting chiefly of exudation corpuscles, and nuclei. Mr. Hutchinson remarked that the occurrence of epithelial cancer in the internal organs had for long been a well ascertained pathological fact, eight or ten authenticated instances being on record. Such cases ought to be allowed to remove entirely the hesitation which some Surgeons have shown as to classing the epithelial form amongst the other varieties of true cancer.

Dr. Gibb asked if the deposits in the lungs were on the epithelial surface of the tubes and exposed to the air.

Mr. Hutchinson replied, that they were evidently in the parenchyma of the lung; of course they had involved many air-cells, and it was impossible to say where they had originated.

Dr. Edward Smith said that it was a matter of great moment to determine exactly whether the deposit was in the walls of the air-cells or on their free surfaces.

Dr. Wilks remarked that recurrence of epithelial cancer in internal organs took place in other organs than the lungs, as in the liver and supra-renal capsules.

Mr. Hutchinson stated that in one case secondary deposits, consisting of epithelial cells, had been found in the heart. He could not see the difficulty in admitting the production of epithelial cancer as a secondary form in the interior of organs and at a distance from epithelial surfaces. So far from its being contrary to pathological doctrines it was quite in accordance with the generally-accepted theories of cancer. The case which he had adduced simply proved what was *à priori*, most probable,—that epithelial cancer was capable of conforming to the same laws of reproduction as the other varieties. No doubt the deposits in the lungs originated within the capillaries, and were the direct result of the implantation of cancerous nuclei and plasma absorbed into the circulation from the original site of the disease. This was what we constantly observe in the case of medullary cancer, and what was a still more striking instance, osteoid cancer. In the latter disease bone would be reproduced in lymphatic glands, in the liver, and in the lungs. He did not believe that epithelial cancer could begin *de novo* on any but an epithelial or epidermic surface, but that secondary deposits might occur at a distance from such structures he could not doubt.

Pastrana *est mortu, vive* Pastrana!—The bearded lady, it will be remembered, died a short time since in giving birth to a child, and was afterwards claimed for the Anatomical Museum of Moscow, where the mother and offspring figured amongst the curiosities preserved in spirits of wine. Mr. Lent, the proprietor and husband of the living phenomenon, chagrined at the loss of his valuable speculation, has lately succeeded, by the production of irrefragable proofs of the reality of the marriage, in reclaiming his property from the domain of science. The poor lady, it seems, is to have no rest in the grave, and, in the enterprising hands of her former spouse, makes as profitable a speculation in her glass coffin as during the more active period of her lifetime.

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OBITUARY.

DR. RIGBY.

Dr. Edward Rigby, whose death it was our melancholy duty to announce last week, was the son of the late Dr. Edward Rigby, of Norwich, who attained great celebrity by the publication of a valuable essay on Uterine Hæmorrhage, and various other Medical and Philosophical works.

With a twin sister, who survives him, he was born on August 1, 1804. He frequently spoke of the curious circumstance that he was one of six children born at two births, his mother, at a subsequent confinement, having produced quadruplets. His twin sister testifies that as a child he was remarkable for his strong sense of duty, his discrimination between right and wrong, and his strict truthfulness. Remaining under the care of his mother until he was eight years of age, he was then placed with the Rev. William Drake, a clergyman of the Established Church, and subsequently was sent to the Grammar School at Norwich, then directed by the Rev. Dr. Valpy. Among his schoolfellows at the Grammar School were Sir James Brook, Rajah of Sarawak, and Sir Archdale Wilson, of Delhi celebrity, with whom he afterwards continued on terms of intimacy, and whose portraits occupied places on the walls of his consulting-room.

At fifteen he was placed with the Rev. James Layton, a clergyman at Catfield, in Norfolk, who received six or eight pupils preparing for the Universities. The Medical Profession was not his own choice. His own predilections were for a sailor's life, but his wishes in this respect were overruled by his father, and his energies directed into another channel. At the age of seventeen he attended the practice of the Norfolk and Norwich Hospital, and the same year he had the misfortune to lose his father. A year later he went to the University of Edinburgh, and there pursued his studies with such industry and energy that he passed his examinations for the degree of M.D. before attaining his majority, and actually received his diploma on his twenty-first birthday, "the first lawful day in August" being prescribed by the statutes of the University as the day for conferring degrees. Had the subject of our memoir been born a day later in August, he would have been under age, and could not have graduated until the following year. After his graduation Dr. Rigby studied some time in Dublin, and, in the autumn of 1826, went to Berlin, where, in the University and Lying-in Hospital of that city, he gave special attention to the study of midwifery under the direction of Professor Siebold. From Berlin he proceeded to Heidelberg, attracted thither by the fame of the elder Naegelé. From Professor Naegelé he received much kindness. The Professor was naturally interested in the son of one whose Medical works were well known and appreciated throughout Germany, and accorded to him every facility possible in prosecuting his studies in Obstetric Medicine, giving him an opportunity of being present whenever a case occurred attended by difficulty or danger.

By his residence in Germany Dr. Rigby not only became thoroughly conversant with the German language, which he spoke fluently, but he had the rare opportunity, by personal association with their author, of becoming intimately acquainted with the then new and important observations of Naegelé on the mechanism of parturition. Naegelé's views on this subject, so different from those which had previously been held by obstetric authorities, but which have since received very general adoption, had then but a very limited currency. Dr. Rigby's intelligent mind saw at once the importance of an accurate knowledge of this fundamental groundwork to Practitioners in midwifery, and remarked that an Accoucheur not well acquainted with it "might be compared to a sailor who, putting to sea without a chart, expects to be blown across the wide ocean to the place of his destination, ignorant of the nature and situation of the shoals and sunken rocks that may interrupt his course." Having convinced himself, by personal observations, of the truthfulness of Naegelé's descriptions, he undertook a translation of his pamphlet "On the Mechanism of Parturition," into English. This translation, which contains, besides the original essay on presentations of the vertex, others on presentations of the nates, etc., from MS. kindly furnished by Naegelé himself, and accounts of cases particularly studied by the translator, was published in London in 1829. Through the circulation of this work Dr. Rigby was mainly instrumental in diffusing among English Practitioners a more accurate knowledge of the mechanism of parturition than they had previously possessed, and thus conferred a benefit upon them as well as on their patients.

The same year in which he published his translation of Naegelé, he entered himself as a house-pupil at the Lying-in Hospital in York-road, Lambeth, to which Institution he became subsequently first Junior and then Senior Physician. In 1831 he passed the College of Physicians, and began practice in London. Here his Professional abilities placed him at once in a prominent position; he was appointed the same year in which he began practice Lecturer on Midwifery at St. Thomas's Hospital, and in 1838 was invited to take the vacant Midwifery Chair at St. Bartholomew's Hospital. We have been informed that for a time he held the midwifery lectureships of both these Hospitals, but finding the duty too onerous, he eventually relinquished the one in connexion with St. Thomas's. He continued to lecture at St. Bartholomew's for ten years, when the pressure of his professional engagements in private practice compelled him to retire. For nineteen years he occupied the position of Examiner in Midwifery in the University of London, and only retired from it a few months before his death.

Dr. Rigby's published works on matters connected with Obstetric Medicine have been most deservedly esteemed, and have had a wide circulation, not only in this country, but on the Continent of Europe and in America. He was author of "A System of Midwifery," published as one of the volumes of the "Library of Medicine," edited by Dr. Tweedie. This was one of the first English systematic works on Midwifery, which embodied Naegéle's views on the Mechanism of Parturition; and as it was written in a clear and comprehensive style throughout, it soon became a popular text-book both with students and practitioners. Shortly after this he occupied himself in preparing a second edition of William Hunter's "Anatomical Description of the Human Gravid Uterus," which appeared in 1843, and to which he added valuable foot-notes, and a series of neat and graphic illustrations, partly original, and partly from other authorities. In 1844 he published a work "On Dysmenorrhœa, and other Affections in connexion with Derangement of the Assimilating Functions;" and in 1857, a volume on the "Constitutional Treatment of Female Diseases," which he dedicated to the memory of his father. Besides these larger works he published a small volume of "Obstetric Memoranda," for the use of students and practitioners, and contributed from time to time in the *Medical Times and Gazette* a series of Midwifery Hospital Reports, and practical papers on the Diseases of Women. One of the latest of these had for its title the "Squatting Uterus," a curious and quaint term for a form of relaxation of the uterine tissue, in which the uterus seems to settle down upon itself—a condition at once recognised by those accustomed to treat uterine affections as not unfrequent in occurrence.

As a Practitioner who devoted much attention to the study of the diseases peculiar to women, Dr. Rigby took up a strong position in antagonism to those who were disposed to regard uterine affections as essentially local in their development, and as requiring chiefly local treatment for their cure. In his last work, "On the Constitutional Treatment of Female Diseases," he acknowledged a fear that in these later days the constitutional treatment of diseases of the female generative organs was likely to be overlooked,—an undue importance being accorded to local applications. While thus asserting his belief that these affections were to be regarded as "no more than a fragment of a constitutional malady," he always adopted local treatment when convinced that it would be a useful adjunct to the general means employed. He was throughout life singularly free from strong prejudices, and every innovation in theory or practice received from him most careful consideration; nor was he slow to adopt any means which gave promise of benefit to his patients. He gave chloroform in natural and morbid parturition, with a full sense of the advantages to be derived from its use. Lately he had expressed himself as convinced that in some cases its administration during labour tended to retard delivery; but he believed this effect to be

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only occasional, and that in the majority of instances no delay was induced by it. He made use of the speculum, uterine sound, and other means of diagnosis, in female diseases, and did not scruple to employ intra-uterine pessaries, when he believed that material advantages were to be derived from their employment. In all his relations with his Medical brethren, with his patients, and with the public Institutions to which he was attached, he had the character of being uniformly courteous, unswervingly honest; and he unceasingly devoted all his energies to the efficient discharge of the duties which devolved upon him.

Little more than two years before his death he endeavoured in vain to induce the authorities of the York-road Lying-in Hospital to improve the ventilation of their Institution, which, because it involved expense, had latterly been less efficiently carried out than before. The result of ignorance or apathy was a great increase in the mortality of the inmates from puerperal fever. Finding remonstrance useless, he resigned his appointment as Senior Physician, rather than be considered as countenancing bad sanitary arrangements.

Since the retirement of Sir Charles Locock from active practice, Dr. Rigby had, by the common consent of his Professional brethren, been accorded the first place among obstetric Physicians practising in London. When the Obstetrical Society was founded in 1859, he was unanimously chosen as its first President, and was re-elected again for 1860. So great was the esteem with which he was regarded, that he was to be nominated by the Council as President for the third successive session, 1861. But, on the very day on which it was proposed to re-elect him President of the Obstetrical Society, his remains were followed by his sorrowing family and friends to their last resting-place in Kensal-green Cemetery.

Dr. Rigby's industry, perseverance, and tenacity of purpose were proverbial, and would have made him eminent in any profession. He was devoted to his professional pursuits, and taxed his energies beyond what his strength was capable of enduring. He had a fine physical development, combined with a vigorous intellect, but it was too much to expect that even the strongest frame should be able to accomplish thirty years of hard professional work, with less than thirty days of holiday. Almost a year ago he began to experience indications of declining health, the symptoms being chiefly referrible to the bladder. The inconvenience at first was not such as to give rise to any serious apprehension, and he continued to work as usual, until the autumn of the past year, when he was induced to make a journey into Russia for the double purpose of recreation and of visiting relatives. He returned to town apparently much stronger; but the improvement was of short continuance. More urgent symptoms developed themselves, which were referred both to disease of the bladder and kidneys, and as no stone was found in the bladder, some malignant disease was suspected to be present, but it is singular that he never had any albumen nor abnormal deposit in the urine. Later, such indications were present as led some of his Professional friends to surmise that malignant disease might be present in the stomach or some other abdominal organ. The decline of health was gradual, until a few days before his decease, when intense congestion of the lungs supervened, which occasioned severe dyspnœa, and was the immediate cause of death. Another singular feature in the case was that for four days before death there was almost total suppression of urine, but no head symptoms whatever. A post-mortem examination disclosed a mass of cancerous disease of the scirrhus character, which had invaded a large portion of the posterior and left wall of the bladder, and had involved the prostate. Several vegetations of a similar character projected into the bladder, but there was no ulceration of the mucous membrane. The urethra was bent towards the right side, while the apertures of the ureters were almost closed by the progress of the disease. The ureters were much dilated above, the pelves of both kidneys were also dilated, and the cortical portion of each kidney was pale, fatty-looking, and thin in proportion to the tubular part. No disease was found in the abdominal viscera, but the lungs were intensely congested, and a cicatrix caused by old tubercle was present in the apex on the right side.

Dr. Rigby married in September, 1838, Susan, second daughter of John Taylor, Esq., F.R.S., F.G.S., who died in 1841, leaving him one daughter. He married again in 1851, Marianne, eldest daughter of S. D. Darbishire, Esq., of Pendyffryn, North Wales, who died in 1853, leaving him two daughters. In addition to the honours previously mentioned, he was F.R.C.P.; F.L.S.; Member of the Imperial and Royal Society of Physicians of Vienna; of the Royal Medical and Chirurgical Society of Berlin; of the Royal Medical Society, Copenhagen; of the Swedish Society of Physic; and Corresponding Member of the American Medical Institute.

He died scarcely full of years, but full of honours; and of him may be written with equal justice the eulogy pronounced by Mr. Cross, of Norwich, on his father—

"Habuit eundem finem vivendi ac philosophandi."

MEDICAL NEWS.

APPOINTMENT.

MACKAY.—Dr. Mackay, of the Naval Hospital, Plymouth, has just been promoted to the rank of Deputy-Inspector, and appointed to the charge of the Naval Hospital, at Hong-kong.

DEATHS.

BRIEN.—Recently, Edward Henry Brien, Surgeon, R. N. (Seniority 1797.)

COLEBY.—December 28, at North Walsham, Norfolk, John Coleby, M.R.C.S.

FLUDER.—December 23, Charles Fluder, of Lymington, Hants, M.D. Giessen; M.R.C.S. Eng.; L.S.A. Lond., aged 55.

GIRVAN.—Lost, on board the *Camilla*, Hugh Girvan, Surgeon of H.M. Brig *Camilla*, 16 Guns. (Seniority 1856.)

GRAVES.—December 24, at Gloucester, of pulmonary consumption, Hugh R. Graves, M.R.C.S. Eng., aged 23.

MAGRATH.—December 27, in London, Andrew Nicholson Magrath, late Director-General Madras Medical Department, aged 58.

MCCOMBIE.—Recently, William McCombie, Assistant-Surgeon R.N. (Seniority 1860.)

MORGAN.—Lost, on board the *Camilla*, Edward Morris Morgan, M.R.C.S. Eng., the Assistant-Surgeon. (Seniority 1860.)

POLLOCK.—December 16, at Dunalis House, near Coleraine, David Pollock, late of Everton, Liverpool, M.D., and L. M. Univ. Glasg.; M.R.C.S.E.

TAYLOR.—December 22, at Shanagolden, County, Limerick, Henry Taylor, M.B. Trin. Coll. Univ. Dub.; L.R.C.S. Irel., aged 48.

WILLIS.—December 28, at Cranham Cottage, Garngad-road, Glasgow, Robert Willis, L.F.P.S. Glasg.

ROMAN, OR HOT-AIR BATH.—We are glad to learn that a Company will shortly be registered for the re-establishment amongst us of the ancient Baths of Rome. These institutions have already become very popular under the title of "Turkish Bath," but the temperature of the hottest room in those already constructed has never been regulated under the advice of the Profession, and the consequence has been that patients have in too many instances received harm, rather than good from the use of them. The promoters of the new Company intend, we believe, to consult the heads of the Profession, previous to completing their structures, and an opportunity will be thus afforded of obtaining Roman Baths, not only elegant and convenient in their appearance, but wholesome in their internal arrangements.

MORTALITY OF THE CITIES OF THE UNITED STATES.—Dr. Jewell supplies the following figures for 1859:—

	Population.	Mortality.	Ratio to Population.	Deaths to each 1000.	Per cent. of deaths to Population.
Providence..	52,000	982	1 in 52·09	19	1·83
Boston.....	180,000	3,738	1 48·15	21	2·07
New York ..	800,000	21,645	1 36·09	27	2·70
Philadelphia	625,000	9,742	1 64·15	15	1·55
Baltimore ..	253,000	5,039	1 50·02	20	2·

A NEW EUDIOMETER.—M. Dumas has recently made, in the name of its inventor, M. Hervé-Magon, a communication to the Académie des Sciences, respecting a eudiometer of extraordinary power, and of still greater simplicity: not only does it measure the quantity of rain which falls in a given time, but registers the time during which the rain has continued, at what time it commenced, whether it has been continuous, or when this has not been the case, when the intervals have occurred. Still more wonderful, it counts the number of drops and weighs them! M. Dumas announced the exact number of milliards of drops which fell in a given time and space. The simplicity of the eudiometer is not the

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least striking circumstance. It consists only of some round leaves of paper, impregnated by a solution of sulphate of iron, and covered, after drying, with gall-powder, rendered adherent by means of gum-sandrach. This is put into motion by clock-work. The rain falling on its prepared surface produces ink, and records itself its actions.

ELECTION OF M. LONGET AT THE ACADÉMIE DES SCIENCES.—M. Longet has just been elected a Member of the Section of Zoology and Comparative Anatomy after a severe contest. The committee presented the following names to the Academy in order of preference, viz.:—MM. Blanchard, Gervais, Martin St. Ange, Robin, Hollard, Gratiolet, and Pucheran. To this already long list the Académie added (an unusual procedure) two names, MM. Longet and Poiseuille. This last declined the contest; and on the first round of the ballot-box the numbers were found to be—Longet 28; Blanchard 25; Robin 5. The requisite majority not having been obtained, a second vote was taken, when the numbers were—Longet 31, and Blanchard 27. MM. Elie de Beaumont, and Charles Dupin, have been elected into the Geographical Section.

DR. WARE, an American Physician, has given us the results of his experience on "Hemoptysis as a Symptom." Since the year 1819, 386 cases have fallen under his observation, and it is from these that he draws his conclusions. He finds:—1. There, then, is rarely any immediate danger from an attack of hemoptysis, especially the first, except when there is some general affection of the lungs of a congestive or inflammatory character. 2. That of all cases of hemoptysis, less than two-thirds end in phthisis; consequently that, in all those unaccompanied by distinct indications of the presence of tubercles, there may be held out to the patient a reasonable prospect of recovery, or, at least, of a disease that will be gradual in its progress. 3. That the most favourable cases, as to complete recovery and future immunity, are those preceded or accompanied by catarrhal symptoms. 4. That no patient who has once had hemoptysis, however slight, can ever afterward be regarded as entirely secure from the development of tubercular disease. 5. That those cases of phthisis which are ushered in or accompanied by hæmorrhage, especially if it be copious, are more likely than others to be protracted. 6. That hæmorrhages occurring in the latter stages of phthisis in large quantity and of continued duration, are liable to be either speedily fatal from their quantity, or to prove so after a short period from the embarrassment to the function of the lungs which accompanies them—but that such cases are of rare occurrence.

QUOVIS LIGNO?—Those who write so strongly and dogmatically just now against the uses of mercury in syphilis, and in various inflammatory affections, are but the lineal descendants of a regular race, or genus, of anti-mercurialists. The late Dr. J. Gregory, writing sixty years ago, might waken up and write much in the same strain again. "We have used mercury," he says, "near three hundred years, as a cure for the fashionable distemper; and, though strictly speaking, not *universally* with success, yet with success infinitely more general and more complete than we have experienced from any other remedy in any other disease. But it has, during all that time, been the subject of incessant and keen disputes; and at this hour the disputes about it are more violent than ever they were. It is disputed even whether mercury (strictly speaking) ever did any good in the pox; whether it be quite inert, or whether it has generally done harm; and it is maintained that it is not the mercury itself, but something united with it—a kind of air (oxygene)—which has done so much good, and which may be found in much larger proportion, as well as in much greater quantity, in the purest air that we breathe, in pure spring water, and in aquafortis. . . . But to lose no time, some hundreds of patients have been tried with aquafortis, properly diluted with water, and drunk like lemonade. The result of these trials is, of course, a mass of irreconcileable contradictions." Dr. James Gregory was a wit, and meant much by his "of course."

BOOKS RECEIVED.

Nephalism. By J. Miller, F.R.S.E. Glasgow: 1861.

The Visiting List. London: 1861.

On the Theory of the Ophthalmoscope. By George Rainy, M.D. London: 1860.

Bronchitic and Peptic Asthma. By W. Macleod, M.D. Edinburgh: 1860.

On the Condition of the Blood in Mania. By W. C. Hood, M.D. London: 1860.

On the Successful Treatment of Gonorrhœa and Gleet. By J. W. Cooke. London: 1861.

Report of the Worcester Lunatic Asylum. Worcester: 1860.

A Guide to the Food Collection in the South Kensington Museum. By E. Lankester, M.D. London: 1860.

VITAL STATISTICS OF LONDON.

Week ending Saturday, December 29, 1860.

BIRTHS.

Births of Boys, 734; Girls, 754; Total, 1488.
Average of 10 corresponding weeks, 1850–59, 1655·4.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	682	695	1407
Average of the ten years 1850–59	713·8	672·6	1386.4
Average corrected to increased population..	..	..	1525
Deaths of people above 90	2	5	7
Deaths in 15 General Hospitals	40	16	56

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1851.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	376,427	..	5	5	1	7	5	2
North ..	490,396	4	6	14	..	9	8	4
Central ..	393,256	..	17	5	4	9	4	3
East	485,522	3	13	7	1	15	6	3
South ..	616,635	1	8	14	6	59	4	9
Total.. ..	2,362,236	8	49	45	12	59	27	21

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·54 in.
Mean temperature	25·9
Highest point of thermometer	32·2
Lowest point of thermometer	19·2
Mean dew-point temperature	19·0
General direction of wind	
Whole amount of rain in the week	0·00 in.

TO CORRESPONDENTS.

The letter of *M.D.* and *L.R.C.P.* on the College of Physicians is unavoidably delayed until next week.

Medicus.—It does not follow because the agents employed by our correspondents were rogues, that all agents are bad. We believe *Medicus* to be quite right when he says that gentlemen wishing to purchase or dispose of their Practice could often do so more advantageously by advertisement than by means of an agent; but there are many cases where a respectable agent can be of great use.

A Constant Reader will see that Dr. Edmunds has published a full account of the case. It would be unfair to accuse everyone who happens to have injudicious friends connected with the general press, of the authorship of any puffing paragraph which may appear. Such things are often done, and are meant kindly, but cause extreme annoyance.

Dr. Bevan's letter on Scottish Medical Grievances shall appear next week.

Dr. Minarty's letter shall appear in an early number.

An Hospital Physician.—We should be happy to publish the letter on Chlorodyne, but it would have far more weight with the real name of the writer than as an anonymous communication.

Mr. Slater.—Having obtained the diploma last year, the fee for registration will be £5.

ERRATUM.—Dr. Kidd has requested us to state that at page 547 of our last volume he wrote "deaths from chlor*oform*," *not* "deaths from chlor*odyne*."

MEDICAL TITLES.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I must, with your kind permission, trespass on your valuable space to answer the not very courteous letter of your nameless correspondent, signed "M.R.C.S. and L.A.C.," and to remind him of the three

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following propositions which, it would seem, have entirely escaped his observation. Firstly: A L.A.C. is a Licentiate of a trading Company, and is nothing more or less than a mere Apothecary. Secondly: A L.R.C.P. is a Physician, and ranks as such. Thirdly: A Physician is, according to the highest legal authorities, a "Doctor of Physic," which is construed into Latin by the words *Medicinæ Doctor* for which the initial letters M.D. stand; therefore, a Physician may legitimately and legally use the letters M.D. after his name. When your correspondent can disprove the two last propositions and the conclusion derived from them, I shall admit that he is right, and I am wrong; but not till then. As to the M.A. Degree of which he speaks, that higher Degree is conferred on the B.A. of a certain standing, on payment of the usual fees without examination. Doubtless your correspondent, even if qualified, would spurn an honour thus purchased.

I beg leave now to remind your other correspondent that Scotch Graduates, until the passing of the Medical Act, had no legal right whatever to assume the title, or exercise the functions of Doctors of Medicine in England. Such privileges belonging to the Medical Graduates of Oxford and Cambridge, and more recently to those of the London University.

I am, &c.

2, China-terrace, January 2, 1861. JNO. SMYTHE, B.A., M.D., &c.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—The claims of the L.R.C.P. have occupied much space in your valuable pages of late; while a much larger class of Licentiates have examined all that has been said in support of the right to change the four initial letters for two which are much better known. The subject has been thoroughly ventilated, and it must now be quite evident to all that the L.S.A. has an equal right with any other Medical Licentiate to the title of Doctor.

The title of Doctor has long been conceded us by the public; the opinion of eminent lawyers if worth obtaining, I have no doubt would be equally favourable; and every member of our Profession well knows that at present the L.S.A. is quite equal in classical and Medical attainments to the L.R.C.P.; therefore, in future, for the sake of uniformity, let every one who has undergone an examination in Medicine claim the title of Doctor.

I am, &c. T. JONES, L.S.A.,

January 2, 1861. and in future, DR. JONES.

A CORONER AT FAULT.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Allow me to relate to you the following case:—About ten minutes past six on the morning of the 24th ultimo, I was called up to see a child, who had just been brought dead into the institution of which I am one of the resident Medical officers. The father of the deceased stated that his little daughter had been apparently in perfect health until between nine and ten o'clock in the evening. The child had had a slight cought for two or three days previously, but it was so slight and occurred so seldom that the father took her out for a walk in the afternoon. Between nine and ten that evening the mother noticed "a peculiar noise in the throat." Her husband went and obtained a cough mixture from a chemist, who ordered a teaspoonful to be administered now and then. The symptoms not having been relieved, the child was carried to the Hospital, but died on the way. On questioning the father as to the state of the respiration, he said that he had not noticed any unusual difficulty of breathing during the child's brief illness. I reported the case to the coroner, and requested an inquest and post-mortem. To my surprise that gentleman sent his functionary with a reply that he did not think an inquest necessary, as croup was so prevalent at the present time. The above case having come under my notice I should feel obliged if you, sir, or some of your readers, could inform me what the Government regulations are regarding the power of Coroners to hold or decline to hold an inquest? Is it left to their own discretion?

I am, &c.

January 1, 1861. OBSTETRICUS.

[The discretionary power of Coroners is far too great.—ED.]

PHRENOLOGY.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In your leading article for the 15th of December, you say Phrenology is a bubble, a fanciful idea, and an outrage on common sense. If it is all this, it should immediately be exposed and banished from civilised society. I would not presume to criticise your remarks through you own pages, but there is one point which I hope you will give your readers some light upon. You say it has been often and demonstratively exploded. Now, I will feel much obliged if you will inform me when and by whom a practical demonstration, adverse to Phrenology, has been made from a series of carefully-observed facts. If there is any account of them in print, I must have it. I have never yet seen anything of the kind, although I have read everything of any importance which has been printed against the science in Great Britain. Words there are plenty; facts are more scanty than jewels. There is one fact, however, on the other side with which I am well acquainted. My own head has been examined by five different phrenologists, all strangers to me, in England, Ireland, and Scotland. They all gave almost identically the same traits of character, and drew them out with a minuteness and extreme accuracy which could not be attempted by the most intimate acquaintance I have in the world. Now, had these men a science to guide them, or were they inspired and superhuman?

I am, &c.

Coleraine, Ireland, December 17, 1860. JAMES C. L. CARSON, M.D.

[Our correspondent is quite entitled to hold any opinion he pleases concerning phrenology, or any other elogy or opathy; and so also are we. We regret that we do not agree on the subject of phrenology, but we have nothing to subtract from the opinion we gave of the so-called science, in the passage to which he refers in his note. Neither have we either time or inclination to enter into any discussion on the subject; our mind is made up about it, just as it is made up about Mesmerism, homœoquackery, or perpetual motion; and besides, we know only too well where all discussions on matters wherein faith rather than reason is concerned, end. We, therefore, cannot oblige our correspondent by pointing out to him *practical demonstrations* of the absurdity of phrenology.—ED.]

THE BEATING OF THE FŒTAL HEART.

I ponder'd by the bed-side,
I walk'd about the room:
The stillness of my patient
Fill'd my mind with deepest gloom;
The Os was firm and rigid,
Not a fibre of it stirr'd;
And the beating of my own heart
Was all the sound I heard.

I sat me by her right side,
I watch'd her pale, pale cheek;
But as it grew still paler,
I did not dare to speak
I watch'd her for a movement,
Then ask'd her for one word;
But the beating of my own heart
Was all the sound I heard.

It came not—no—it came not,
The night was passing on,
I knew not but my patient
And her Fœtus, might be gone.
To the precept of my teacher
A happy thought referr'd,—
Where he told me, most profoundly,
What sounds were often heard.

The Stethoscope,—then gently
I press'd it to her side,
As though she'd been an angel,
Or were to be my bride.
I press'd it nearer—nearer—nearer;
A sound!—'tis clearer—clearer—clearer;
I did not speak—no—I did not speak a word,
But the beating of the Fœtal Heart was the joyous sound I heard.

T. C. D.

COMMUNICATIONS have been received from:—

Professor SIMPSON; M. CLAUDE BERNARD; Dr. ANDERSON; Professor LAYCOCK; Dr. GARDNER; Dr. EARLE; Dr. DRUITT; Dr. PRIESTLEY; Mr. HENRY SMITH; Mr. HENRY THOMPSON; Mr. HEWSON; Dr. DUNN; REGISTRAR-GENERAL; Messrs. TRAVERS; Dr. SMYTHE; Dr. SULLIVAN; Mr. DALE; Dr. MACKAY; Mr. CHAPMAN; Mr. MONE; Mr. MORTON; Mr. PALMER; Mr. BURMAN; Dr. BATESON; Mr. G. SMITH; Mr. BRYDONE; Mr. MCLEAN, and Mr. GADSBY.

APPOINTMENTS FOR THE WEEK.

January 5. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-Cross, 1 p.m.

7. Monday.

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

MEDICAL SOCIETY OF LONDON, 8½ p.m. Dr. Edw. Smith "On the Action of Alcohol in the Treatment of Disease."

ODONTOLOGICAL SOCIETY, 8 p.m.

EPIDEMIOLOGICAL SOCIETY, 8 p.m. Dr. Milroy "On the Influence of Contagion in the Rise and Spread of Epidemic Diseases."

8. Tuesday.

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Professor Faraday "On the Chemical History of a Candle."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Conclusion of Mr. Milton's Paper "On Eczema;" Mr. John Wood "On Extraction of Stone from the Bladder by Urethrotomy and Dilatation of the Prostate by an Expanding Staff."

9. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m. Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

NORTH LONDON MEDICAL SOCIETY, 8 p.m.

10. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.

11. Friday.

Operations, Westminster Ophthalmic, 1½ p.m.

EXPECTED OPERATIONS.

King's College Hospital.—The following Operations will be performed this day (Saturday) at 2 o'clock:—

By Mr. Fergusson—For Fistula in Ano; Necrosis of Metatarsus.

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WINE AT THE REDUCED DUTY.

W. and A. Gilbey, Wine, Spirit, and LIQUEUR IMPORTERS and DISTILLERS, will send, on application, their detailed Price-list of the peculiar Wines and Spirits of every Country; and any can be tasted at each of their Establishments in England, Ireland, and Scotland; at either of the London Docks, and Bonded Warehouses; at their large Cellarage under the Princess's Theatre; or at their Counting-house and Sample-rooms, 357, Oxford-street, London (three doors from the Pantheon).

W. and A. G.'s connexion—extending to 18,000 Families, and upwards of 80 of the chief Hospitals, Military Messes, and Public Institutions—offers every reasonable guarantee to inspire confidence in their mode of doing business.

WINES FROM FRANCE at the Reduced Duty.

Clarets, Vin Ordinaire, 18s. and 24s., also
Medoc, 24s. St. Emilion, 28s, and St. Julien, 30s. per doz.

Bordeaux White Wines—Sauterne, 18s. and 24s., also Vin de Graves, 24s., and Barsac 24s. per doz.

Burgundy Red Wines—Macon, 24s., Beaune, 24s., Pomard, 30s., Aloxe, 30s., and Volnay, 36s. per doz.

Burgundy White Wines—Chablis, 18s. and 24s., also Pouilly, 24s. and Meursault, 36s. per doz.

Sparkling Champagne, 33s. per doz. quarts, and 18s. per dozen pints. (This Wine possesses great delicacy, exquisite bouquet, and is good enough for any gentleman's table. It is the produce of one of the finest Epernay Vineyards, where we have contracts for direct and regular shipments. We append this remark, as many are under the impression that good sparkling Wines cannot be obtained, but by paying exorbitant prices.) Also other Champagnes, 48s., 54s., and 66s. per doz.

Sparkling White Burgundy, 42s., and Sparkling St. Peray, 42s. per doz

WINES FROM THE RHINE at the Reduced Duty.

White Wines—Hocheimer 18s. and 24s., also Marcobruner 26s. per doz.

Sparkling Hock 38s., also Sparkling Moselle 38s. per doz. quarts, and 21s. per doz. pints.

WINES FROM SPAIN at the Reduced Duty.

Sherry (Pale or Gold) 26s. per doz., or in cask, £4 7s. 6d. per 7 gall. £8 13s. 3d. per 14 gall., and £17 3s. per cask of 28 gall.

The alteration of the Duty enables us to import a really good sound dinner Wine at the above prices.

WINES FROM PORTUGAL at the Reduced Duty.

Port, 8 years in the wood, 30s. per doz., or in cask, £5 1s. 6d. per 7 gall. and £10 1s. 3d. per 14 gall., £19 19s. per quarter cask of 28 gall.

Port, 11 years in the wood, 36s. per doz., or in cask £5 19s. per 7 gall., £11 11s. 6d. per 14 gall, £23 2s. per 28 gall. cask.

We cannot too strongly recommend to Port consumers these matured Wines from the wood—they are the old school of silky Oporto Wine, and certainly more palatable and wholesome than those extremely high-priced old-Bottled Wines, which have nothing left to recommend them but vegetable decay. The public are now beginning to realise what we long ago advocated, that a Wine matured in the wood is preferable to Wine old in Bottle.

WINES FROM THE CAPE OF GOOD HOPE.

Port, Sherry, Madeira, &c., all First Growth, 20s. per dozen, £3 6s. 6d. per 7-gallon cask, £6 11s. 3d. per 14-gallon cask, and £12 19s. per quarter cask of 28 gallons.

Also first growths with age 24s. per dozen, £4 0s. 6d. per 7-gallon cask, £7 19s. 3d. per 14-gallon cask, £15 15s. per 28-gallon.

They are delicate, wholesome, and in every way suitable for either dinner or dessert. In the present state of the Wine markets, there are no Wines we can import to offer to the public as better value for money.

Since the great care that has been bestowed of late years on the culture and careful training of the vine at the Cape, Wine cannot be better and more pure, and the exclusive use of these Wines in most of the important Institutions, of which a list can be had, is a further proof of their restorative qualities.

The Custom-House Returns for 1859 show that W. and A. G. paid duty on the unprecedented quantity of 73,464 gallons of these wines alone in that year.

WINES FROM MARSALA at the Reduced Duties.

Marsala, 20s. per dozen, £3 6s. 6d. per 7-gallon cask, and £6 11s. 3d. per 14-gallon cask, and £10 3s. 6d. per cask of 22 gallons.

This is old Bronte Wine, and considered by many superior to the finest Sherries.

FOREIGN AND BRITISH SPIRITS at the Reduced Duty.

BRANDY, U.V. Brand very fine	16s. 6d. per gallon.
Do. the finest Cognac	22s. "
Do. very old	26s. "
RUM, finest Jamaica	16s. "
WHISKEY, pure old Scotch	18s. "
Do. pure old Irish	18s. "
GIN, excellent Household	11s. "
HOLLANDS, Geneva "Silver Stream" ..	14s. "
Do. do, in the original green Cases and square Bottles, as imported	32s. per dozen.

A small sample of most of the above Wines will be forwarded for 6d.

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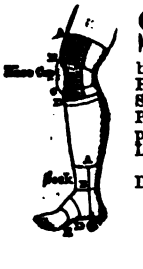
(a) Bulletin de l'Académie de Med. 1850, page 1015; Gazette Médicale, Aug. 17, 1850; Union Médicale, Aug. 15 and 22, 1850; Gazette des Hôpitaux, March 15, 1853, and June 10, 1854; Gazette Hebdomadaire de Médecine et de Chirurgie, Aug. 31, 1855; Revue de Thérapeutique Médico-Chirurgicale, Feb. 15, 1855; Abeille Médicale, Revue Clinique; Repertoire de Chimie et de Pharmacie; Annuaire de Thérapeutique pour 1851, page 199; Orfila, Elements of Chemistry; Mialhe, Chemistry applied to Therapeutics, 1856, p. 319; Quevenne, Essay on the Physiological and Therapeutical Action of Preparations of Steel, page 97, 1854; Bricheteau, Treatise on Chronic Diseases seated in the Respiratory Organs; Soubeiran, Treatise on Pharmacy; Dorvault, Officine, &c. &c.



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ORIGINAL LECTURES.

LECTURES
ON
THE SPINAL CORD,
DELIVERED AT
The College of France,
DURING THE SUMMER SESSION 1860,

By M. CLAUDE BERNARD,
Member of the French Institute; Professor of General Physiology at the Faculty of Sciences, &c.

LECTURE II.
ON THE FUNCTIONS OF THE SPINAL CORD.

Summary: The leading Feature of the Nervous System, when its Physiological Properties are under consideration, is Duality—Sensation and Volition the two great Phenomena which have at all Times been referred to Nervous Agency—Division of the Spinal Cord into Anterior and Posterior Columns—Relations of this Anatomical Disposition with the Origin and Properties of the two Principal Orders of Nerves—Compound Nerves—Dr. Walker's Opinions with reference to the Properties enjoyed by the Anterior and Posterior Spinal Roots—Anatomical Researches of Sir Charles Bell—Experimental Labours of Magendie and Müller—The Introduction of Galvanism as a Test for the Properties of Nerves, principally due to this latter Physiologist—His Reasons for giving the preference to the Lower Animals in Experiments of this Nature—Surgical Directions for opening the Spinal Canal in Mammiferous Animals—The Lumbar Legion usually selected for this Purpose—Magendie's Method—M. Bernard's own Method—Peculiar Disposition of the Spinal Roots in the Dog, which renders this Animal a fit Subject for similar Experiments—Necessity of allowing the Subject a few Hours' Rest, after the Operation has taken place—Various Experiments on the Properties of the Spinal Nerves—Magendie's Opinions taxed with Contradiction by various Authors—The Existence of recurrent Sensibility, and the Effects of so severe an Operation on Delicate Animals afford a sufficient explanation of this—Legallois' Experiments on the Total Destruction of the Spinal Cord—The Phenomena of recurrent Sensibility analysed and Discussed—Its Origin referred to the frequent Anastomoses between Sensitive and Motor Nerves—The Exchange of Fibres probably occurs in the Terminal Extremities of the Nerves—Views entertained by Professor Jacobowich on the Termination of Nervous Fibres—Their Application to the present Subject—The Source of recurrent Sensibility sometimes appears to arise from less distant Points—Experiments on the Sciatic Nerve adduced in proof of this—In Animals submitted to the Action of Anæsthetics, the Posterior Spinal Roots are the last to be deprived of Sensorial Power, and the first to recover it.

GENTLEMEN,—We shall commence our physiological survey of the Nervous System by examining the properties of the central axis, interposed between the encephalic mass, and the outer surface of the body: we allude, of course, to the spinal cord, from which by far the greater part of the peripheric nerves arise, and towards which they return.

The first idea which strikes the mind, when the physiology of the nervous system is under consideration, is that of Duality, as a characteristic of its peculiar functions: in fact, Sensation and Motion are the chief phenomena which have in all ages been viewed as specially connected with the nervous element; and the existence of sensitive nerves, as distinct from motor branches, was admitted without the slightest hesitation by all scientific observers, long before we possessed a positive demonstration of the fact.

The spinal marrow is divided by several deep furrows, into anterior, posterior, and lateral tracts. From the posterior columns a series of nerves emerge, on every one of which a ganglion is formed, while the roots which arise from the anterior and lateral tracts are not provided with ganglia. Shortly after making their appearance, these two different orders of nerves coalesce, and by the mingling of their fibres, form a compound or mixed spinal nerve, which enjoys both the power of motion and the faculty of sensation. Such, till comparatively a recent period, were the only nerves known to exist; but the singular bifurcation exhibited by the spinal pairs at their emergence from the central axis, had already attracted the attention of anatomists, when Dr. Walker, relying upon some pathological cases, thought himself entitled to attribute motion to the posterior, and sensation to the anterior roots. But the immortal labours of Sir Charles Bell soon threw an entirely new light upon this subject: and the discovery which Anatomy had commenced, was brought to complete maturity by physiological investigation: the experiments of Magendie have satisfactorily proved, that the posterior columns of the spinal cord, and the corresponding roots, are the real sources of sensibility, while the anterior tracts are exclusively connected with voluntary motion.

The experiments of Magendie were successfully repeated on the lower animals, by J. Müller, who considers these inferior species as best suited to the operation. It is performed with much greater facility in frogs and toads than in mammiferous animals, and does not exhaust the former so completely as the latter;—a circumstance which the physiologist ought not to neglect, in the selection of subjects for his experiments, since the disorders which result from the operation itself may evidently mislead him with reference to the normal properties of the spinal cord. The application of galvanism to this branch of physiology, for the purpose of distinguishing motor from sensitive nerves, is principally due to this author. This method of investigation is founded on the hypothesis of a perfect analogy between the properties of the nervous system in Man, and in the lower animals; but this conclusion which is pointed to by analogy, is also confirmed by direct experiments. If the properties of homologous tissues were not identically the same in all animated beings, all comparisons of this kind would evidently be erroneous. Fortunately for Science the reverse is the case, and facts once established with respect to animals belonging to the higher ranks of the scale, are equally true in the simplest of all living organisations: but at the same time a notable difference exists between the anatomical dispositions met with in different kinds; and operations of great difficulty and danger in the dog (such as the incision of the spinal canal), are sometimes attended with little inconvenience in animals of a lower type. In some cases, experiments which it is impossible to perform in one species will easily be realised in another.

In all physiological researches it is of the highest importance to fix with the utmost precision the rules for making an experiment; you will therefore easily understand how anxious we must be to lay down the rules for ascertaining the chief properties of the spinal pairs, on which the whole fabric of our knowledge is established.

The method actually employed consists in laying bare the spinal cord by an opening made into the vertebral canal: the subjects for these experiments are usually selected from among domestic animals,—dogs, cats, horses, rabbits, guineapigs, etc. But, among mammalia, the dog is evidently of all animals the best adapted to this purpose; in fact, a peculiar anatomical disposition of these parts in the canine species affords considerable facilities for observation in this respect.

The spinal cord, in mammalia, usually terminates in the vicinity of the second lumbar vertebra, giving rise in this point to the nervous branches which compose the *cauda equina*; these nerves escape from the spinal canal, through the intervertebral foramen on both sides, at a considerable distance from their primitive origin. On account of the unusual length exhibited by these inferior spinal roots, the two last lumbar and the first sacral pairs are in general selected for experiments on this subject; in operating upon other regions, we meet with spinal roots of such short dimensions as to be totally unfit for our purpose. Now, as you are aware, the initial portion of the spinal nerves, from their immediate origin down to their emergence through the corresponding intervertebral aperture, is encased in a membranous sheath, and immersed in a serous liquid (liquor Cotunnii); two different proceedings may therefore be adopted, one of which consists in opening the protective envelope, the other in preserving it entire; it is scarcely necessary to say that the latter is by far the most advantageous method; but in those animals in which (as in the human subject) both the sensitive and motor roots, which coalesce into a single nervous pair, are enclosed within the same fibrous sheath, to avoid the inconvenience of opening it is impossible: the two different classes of nerves must be laid bare in order that their special properties may be separately examined. In the dog, however, each spinal root being provided with a distinct membranous case, the experiment may be performed without laying the nerve bare, and allowing the liquor Cotunnii to escape; a circumstance which tends in a considerable degree to preserve the normal amount of sensibility in this animal, after the spinal canal has been opened. A similar disposition exists in cats; but the lumbar roots are not so long as in the canine species.

The operation is sometimes also performed upon the second cervical pair, which, in the dog, is so situated as to allow its properties to be tested without opening the vertebral canal,

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as a special channel exists for the passage of this nerve within the axis itself.

The dorsal region, which unites all the difficulties which can possibly impede the experiment, is completely left aside by modern physiologists.

After having selected the point on which the operation is to be performed, the operator saws through the vertebral laminæ on each side, and removes the osseous arch thus insulated from the vertebral mass. When this has been done on several points at once, a considerable portion of the spinal cord is laid bare, together with the corresponding roots. But the extent of such a mutilation is frequently productive of fatal accidents; and the loss of blood which inevitably takes place often reduces the animal to a state of complete insensibility. Our personal experience has led us to adopt a less extensive interference. We are satisfied with removing a small portion of the laminæ belonging to the last two lumbar vertebræ: we operate on one side only, and in the immediate vicinity of the intervertebral foramina. In this manner four spinal roots, still protected by their membranous case, are displayed. A thread is then passed under each of these nerves, and their properties may thus be examined at leisure, the animal having been comparatively little fatigued with the operation. It is fit, however, in all cases to allow the subject a few hours' rest: sensibility then resumes its former sway, and the animal's skin, which for a few moments appeared entirely benumbed, resumes its former sensitiveness.

Let us now consider the principal experiments to be performed upon the nervous trunks thus placed within our reach. The first investigations made upon this subject belong to Magendie: he divided the posterior roots, producing in this manner a complete paralysis of the sensorial faculties in the corresponding parts of the body, as well as in the circumferential portions of the divided nerve itself; while, on the other hand, by dividing the anterior roots, a paralysis of motion alone was found to be the result. The experiment, however, succeeds better in frogs than in the higher vertebrata; for the injury sustained by the muscles inserted upon the spinal processes, in the back, is of itself sufficient to produce partial paralysis. Such is not the case in Batrachians. The difference between the properties enjoyed by the anterior and posterior roots may also be exhibited by the application of galvanism; the anterior branches being divided, no result is obtained by galvanizing the central extremity, while convulsive motions are produced by the application of this agent to the peripheral portion of the nerve. The inverse takes place when galvanism is applied to the posterior roots, these having been previously divided: when the terminal extremity of the nerve is excited, no effects whatever are obtained; but the central portion, when galvanised, gives rise to exquisite pain. The views adopted by Magendie with reference to the properties of the spinal nerves, have been taxed with inconsistency by various authors: he states, in fact, that the anterior roots, although in general deprived of sensibility, do sometimes exhibit this faculty in a high degree; while the posterior roots, although highly sensitive in most animals, are occasionally found indifferent to the actions of direct stimuli. But the contradictory results obtained by this illustrious observer are daily met with in practice; and we now possess the key to the difficulty; that singular phenomenon known under the name of recurrent sensibility explains the sensorial power exhibited by the anterior roots; while the insensibility which the posterior ones occasionally evince is known to be the consequence of a sudden debility, resulting from the operation itself. By adapting the cardiometer to the carotid artery, before opening the spinal canal, we have noticed ourselves an enormous diminution of the pressure of the blood at the conclusion of the experiment; and as this occurs in cases in which no considerable loss of blood has taken place, it can only be attributed to the instantaneous depression of the nervous power. When the animal happens to be in full digestion at the time of the experiment, the process stops immediately; and, lastly, certain animals—the horse and rabbit, for instance—are liable to sudden death in consequence of the operation: no wonder, therefore, that the posterior roots should for a time be deprived of sensibility; and the same property in the anterior roots being entirely derived from their congeners, equally disappears when the shock has been too severe. An experiment of Legallois affords a remarkable illustration of this: he often attempted to destroy in little cats and dogs the medulla spinalis in its whole extent, excepting only the respiratory portion of this apparatus; and in all his experiments, death was invariably the consequence: he therefore supposed the total destruction of the spinal cord to be inevitably fatal, even when its upper portion had been spared; but he was not justified in this conclusion, as you will see, for when the animal is placed in a state of anæsthesia the operation does not immediately prove fatal. If, therefore, pain is the cause of death in such cases, you will not be surprised at the deep perturbations occasioned in the state of the nerves by an influence which not unfrequently destroys life itself. It is therefore convenient, before operating on the spinal canal, to place the subject in a state of complete anæsthesia, not merely in order to facilitate the surgical process, but also for the purpose of husbanding the physiological excitability of the nervous system.

When proper care has been taken to avoid the above-mentioned difficulties, the existence of recurrent sensibility, as a constant property of the motor branches, will easily be ascertained. The operator having laid bare one of the spinal pairs, the animal evinces acute pain when either of the roots is excited; so that, in the normal condition, both orders of nerves are evidently endowed with a high degree of sensibility. The anterior root being now divided, its peripheric extremity will be found sensible to various kinds of stimuli, while the central portion remains unaffected; such is the phenomenon which has been described under the name of Recurrent Sensibility. It is evidently derived from the influence which sensitive nerves exert over the corresponding motor branches; for, as soon as the posterior root is divided, all sensation is at an end in the motor nerve, and the central portion of the sensitive root, which lies in contact with the spinal marrow itself, alone retains its characteristic property.

The absolute independence of each nervous pair, taken individually, is evidenced by the fact that recurrent sensibility still continues to exist in a motor nerve when the pair which lies above and that which lies below it have simultaneously been divided. As long as the corresponding posterior root remains uninjured, the sensitive powers of the motor nerve retain their usual force.

This singular property, which invests the motor branches with faculties derived from the sensitive apparatus, is to all appearance derived from the anastomoses which take place between their terminal extremities; it has also been supposed that, after reaching the surface of the body, certain sensitive filaments are conveyed back to the nervous centre along the motor branches. It is, at all events, an indisputable fact, that the exchange of nervous fibre does not immediately take place after the junction of the spinal roots, but occurs at a much greater distance; for, if the mixed nerve which passes through the intervertebral aperture is divided, recurrent sensibility is abolished in the corresponding spinal root.

Professor Jacobowich, in his interesting researches on the termination of nervous fibres, has ascertained that they sometimes end in nervous cells, or corpuscles, and at other times, in plexiform ramifications of a peculiar kind. In the first case, they reach the cellular paries or the nucleus itself, and there terminate; a disposition observed in the chief viscera, in the corpuscles of tact, and upon various other points. In the second case, the cylinder axis or primitive band emerges from the neurilemma, or sheath, which surrounds it, and joins the neighbouring cylinders. In these terminal inosculations is most probably the source of recurrent sensibility to be found; in these points do the sensitive fibres, after reaching the cutaneous surface, return in the opposite direction. It seems, however, that some less distant anastomoses may occasionally prove the source of this property, as we shall prove by experiment at a future opportunity. The origin of the last lumbar pair having been laid bare, let the anterior root be divided; its peripheric extremity will then exhibit an acute sensibility; but if the great sciatic nerve (which contains almost all the filaments emanated from this pair) is cut through after its passage under the great sciatic notch, at the point where it emerges from the pelvis, a considerable diminution of recurrent sensibility in the anterior root will of course be observed; yet this property, however lessened in its intensity, does not totally disappear,—a fact which would appear to prove that in exchanging their fibres, the sensitive and motor trunks are not exclusively connected through their terminal extremities, but that certain other points are equally concerned in the transmission of this property. In the case of the sciatic nerve, the sensitive

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filaments which still exert their influence after the operation, are probably derived from the hypogastric plexus.

The sensorial faculty would seem to lose its intensity by degrees, in proceeding from the primitive origin to the ultimate termination of the special fibres with which it is connected; for in animals submitted to the inhalation of chloroform, the spinal roots having previously been exposed to view, sensibility disappears in the anterior roots before abandoning the outer surface of the body, and dwells in the posterior roots long after it has ceased to exist in all other parts. The reverse takes place when the animal is allowed to revive, the posterior roots being the first, and the anterior roots the last, to recover the sensorial power. We are, therefore entitled to believe that in the immediate vicinity of the posterior columns, a higher degree of sensibility exists than in more distant points.

In our next Lecture, gentlemen, we will perform in your presence the more important experiments connected with the physiological views to which your attention has to-day been attracted.

CLINICAL LECTURES

DELIVERED AT

ST. THOMAS'S HOSPITAL IN 1860.

By F. LE GROS CLARK, F.R.C.S.
Surgeon to the Hospital.

Lecture V.

HERNIA—PLASTIC OPERATION FOR CONTRACTION AFTER BURN—TRACHEOTOMY.

Gentlemen,—Two cases of hernia, both requiring operation, were admitted during the past week; and, as one of these presents features of peculiar practical interest, I will make them the principal subject of to-day's lecture. The cases are reported by my dresser, Mr. Waller.

Case 1.—J. A. S., aged 49, a married woman with family, was admitted into the Hospital on November 30. She had been the subject of a femoral rupture for three years, and had worn a truss. Whilst in bed, on the night previous to her admission, the hernia had come down and she could not return it. Opium had been given, and the taxis tried under chloroform, but in vain. An operation was accordingly performed when symptoms of strangulation had existed for twenty-four hours. The sac, which was distended with fluid, was opened, and about two inches of dark-coloured intestine were found beneath a fold of omentum, and readily returned on limited division of the crural ring; the omentum was left in the sac, and the wound closed with a single suture. The patient was much depressed during the operation, and indeed previously. A little brandy was given, and fifteen minims of liquor opii sedativus when she was returned to her bed. She passed a quiet night, and there was no abdominal tenderness on the following day. Pulse feeble, 84. A little ammonia in peppermint-water was ordered, to relieve the distress occasioned by flatulence. The tongue was brown and dry. On the third day castor-oil was ordered, which relieved the bowels; still very feeble; wound puffy and inflamed. A director was introduced to liberate confined matter, the wound having closed, although precautions were taken to prevent this. Small quantities of wine and brandy were given, with nourishment. At the expiration of a week she was going on well, though still feeble: the wound discharging freely. No abdominal tenderness.

Case 2.—M. A. P., aged 46, a married woman, was admitted into the Hospital on December 1, with symptoms of obstructed bowel. She had been the subject of an irreducible femoral rupture for twelve years. This had never been any inconvenience to her, and she had never worn a truss. Six days previously, when talking to a friend, she felt a sudden pain in the abdomen, accompanied by faintness and sickness. The pain soon subsided, but vomiting came on, and continued, without intermission or any action of the bowels, until the date of admission. The total absence of local symptoms, either connected with the hernia or otherwise, indicating strangulation, had induced the gentleman under whose care she was to try freely the use of purgatives; and it should be remarked, that she had had a similar attack three years since, which then yielded to the use of aperient medicine in two or three days.

The hernia naturally first attracted attention. It was found to be free from tension or the slightest tenderness when handled. It could be freely moved, as it overlapped Poupart's ligament, and had the feel of an old omental protrusion. She complained of no tenderness over any part of the belly, which was resonant over the course of the colon, with the exception of the right iliac fossa. The only suffering she complained of was in the epigastrium, but this seemed to have no association with the swelling in the groin or any other part. She vomited repeatedly large quantities of brown fluid, which was evidently the contents of the small intestine. This character of vomit, which might be termed stercoraceous, had existed for three days. The tongue was tolerably clean and moist; the pulse 80, and soft; and the countenance free from any anxious or pinched expression.

In the absence of any indication that the hernial tumour was the seat of constriction and the cause of the symptoms, it was determined to wait, whilst an effort was made to quiet the stomach and procure rest. A large injection of warm water, about two quarts, was thrown into the bowel, which distended the colon. The greater part was retained for some hours, and then came away, only discoloured with fæcal matter. Three-minim doses of dilute prussic acid, with sesquicarbonate of ammonia, were given at two hours' interval, followed by a grain of opium, and this treatment, accompanied with ice swallowed in fragments, quieted the stomach and gave some sleep.

On the following day, the vomiting, though less urgent, continued. In consultation with Dr. Bristowe, it was decided to continue the same treatment, and to throw up nourishment into the rectum, in the hope that the stomach might be able to bear some aperient if the sickness were controlled; if not, then to explore the hernia, or extend the examination further, if necessary.

As the patient remained in every important respect unchanged on the following day, thirty-six hours after her admission, and the eighth day from the commencement of the attack, the hernial sac was exposed and laid open. A small quantity of grumous fluid escaped, and the bulk of the contents consisted of congested and dark-coloured omentum, overlapping Poupart's ligament. On unfolding and raising this, an object presented itself, which was at first supposed to be a lymphatic gland; but on more careful examination and drawing it out from the crural ring, it was found to be a small knuckle of intestine, including only a portion of the calibre of the bowel, and quite healthy in appearance and feel. The opening of the crural ring was slightly enlarged and the bowel easily returned. The omentum was then cut away with a pair of scissors, the neck of the mass being left adherent to the sac. The wound was closed with a single suture. She vomited profusely immediately after the operation.

During the day she took some nourishment, and retained it; but being restless at night a grain of opium was given to her. On the following morning she had had a slight fæcal evacuation from the bowels, and had not again vomited. Face flushed; pulse 80, fuller; surface warm (it had been chilled); took light nourishment, but was constantly craving for something sharp and palatable; tongue clean and moist; less tympanitis; still complains of constriction across the epigastrium.

On the second day after the operation her bowels were again slightly moved; and as she still seemed uneasy and flushed, some castor-oil was administered by the mouth. Wound sluggish and unhealthy.

On the third day the bowels were more freely relieved. Her general condition improved. No abdominal tenderness.

On the fourth day (the present date), she is not so well. Wound sloughy; sickness; pulse quickened; a tendency to purging. To take acidi hydrocyan. dil. mij., tinct. camph. co. ʒj. in peppermint-water every six hours.

[Since the date of the above Lecture, Case 1 has made a good recovery. The second patient whose case is given did not rally after the last date, but died on the 8th day after the operation, without the introduction of any fresh symptoms, or abdominal tenderness. She sank exhausted, with a dry tongue, and wandering intellect. The following account of the post-mortem appearances has been supplied by Dr. Montgomery:—

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"In opening the abdominal cavity the cæcum was found adherent to a portion of the small intestines, which proved to be a part of the ileum, at about its upper third. In severing the adhesion, the ileum was found perforated at the centre of the spot where it had been glued to the cæcum. The surface of adhesion was oval and its largest diameter about half-an-inch. The perforated spot was half the size. This surface of adhesion formed only a part of a larger ulcerating surface, which was partially also in contact with a bit of omentum that had been previously attached to the peritoneum, and was now situated near the outer margin of the wound. The opposite side of the ulcerated portion of the ileum was glued to the peritoneum all round the anterior margin of the wound. The inflammation that had caused this ulceration and these adhesions seems to have extended by contiguity from the wound to the adjoining parts of the abdominal cavity."]

The former of the foregoing cases presents no remarkable points of interest. It belongs, indeed, to by far the largest category of strictured femoral ruptures, as far as my experience enables me to judge; viz., omentum as the chief or permanent contents of the sac, and a super-added knuckle of intestine which becomes strangulated. Before operating I told you, that, from the history, I anticipated such would prove to be the case. I may as well, however, avail myself of the present opportunity to make a few remarks on the mode of operating in such cases; and I may first observe, that I adopt that method which has for its basis the division of the stricture without opening the sac, only in rare and exceptional cases. Many reasons have induced me to prefer this practice, and my conviction that it is both safer and more satisfactory in the large majority of cases has been confirmed by increasing experience. The exceptions I am disposed to make are those of recent ruptures,—I am speaking now of femoral hernia,—where the strangulation, though firm, has not existed long, or where, in rupture of longer standing, the entire contents of the sac were previously reducible. I do not say that, even in all such cases, I think it admissible to return the hernial protrusion without opening the sac; but in such only do I think it advisable, as a rule, to make the attempt. I believe that the risk of exposing the interior of the sac in strictured hernia is very much over-rated. I doubt whether any serious amount of danger is super-added by such exposure to the already existing mischief consequent on strangulation. A diseased action is already established, and the condition of the serous membrane, as regards its susceptibility, is very different from that of the same membrane in health; whilst, on the other hand, the counterbalancing advantages of ascertaining, and being guided by, the actual condition of the hernial tumour very much outweigh, in my estimation, the imaginary or real risk attending exposure. In inguinal rupture the cases are also rare where it is practicable to reduce a strangulated portion of bowel without division of the neck of the sack, which is so commonly the seat of stricture. But, of course, it is not, therefore, necessary to rip open the whole sac, if the hernia have descended into the scrotum, though even in such cases an extended exposure of the contents of the sac is sometimes desirable. When the stricture happens to be at the external ring, the division of this part is generally sufficient, as in the last case, if I remember rightly, of this form of hernia on which I operated.

The patient whose case I first narrated is naturally feeble and sickly; yet I see no reason why she should not make a good recovery. Though I took the precaution to leave a considerable aperture in the wound for the escape of the purulent secretion, the wound has healed so far as to render it necessary to pass a director to liberate the confined matter. This is a point of considerable importance at all times, but especially when the hernial sac is opened, and omentum left within it. I mean to allow space for drainage; as undoubtedly there is, under these circumstances, a risk of contamination of the serous membrane, if the confined matter find its way backwards into the peritoneal cavity.

The second case I have narrated is a remarkable one,—remarkable for the entire absence of any local symptoms, beyond the bare existence of a rupture of long-standing, to explain the condition in which she was brought to the Hospital. The previous history was certainly that of some obstinate mechanical obstruction in the intestine; and the distended state of the colon, and co-existence of intestinal vomiting, seemed to indicate the lower part of the small gut, or the caput coli, as the seat of such obstruction. The diagnosis was rendered perplexing by the following circumstances. She had once before suffered from a similar attack, and recovered in two or three days. After the first spasm, she had been free from abdominal pain and tenderness, complaining only of constriction in the epigastric region. The femoral rupture presented no single indication—nor had it throughout—of being the seat of the slightest uneasiness. It was soft and moveable, as the patient said it always had been during the twelve years it had existed. When I operated I told you I felt it right to take this step, but that I expected to find healthy omentum only in the sac. In this, however, I was mistaken. I even discussed with my colleague, Mr. Simon, the propriety of opening the abdominal wall above Poupart's ligament, with a view of extending the exploration if requisite: but I thought there were objections to this course.

The issue showed that the omentum was almost in a state of disorganisation, and that a piece of healthy unchanged intestine blocked the crural ring behind it. I pulled this knuckle of bowel down, but it showed no trace of constriction, or even obstructed circulation from pressure: such, at least, was the opinion of my colleagues who stood by. And yet the sequence seems to show, as far as we can judge, that this state of things accounts for the symptoms from which the patient was suffering. How is this to be explained? The only interpretation I can put upon the facts is this. There was a mass of omentum of low organisation, occupying a ring which it had filled for a long period; and the intrusion of a small knuckle of intestine sufficed to block the circulation through the vessels of the omentum, and to arrest the progress of the intestinal contents, without in any way interfering with the more vigorous circulation through the bowel. The degenerated condition of the omentum was clearly not inflammatory in its origin; it was simply passive, congestive, and therefore unattended by pain or tenderness.

The history and actual condition of the patient are my justification for deferring the operation. My opinion, as far as I could form one, was, that there was intestinal obstruction from some cause unconnected with the hernia; and with no local indications to guide me, I thought it right first to distend the lower bowel with warm water, as the obstruction might be intra-intestinal, and, possibly, from fæces in the cæcum; and then to try to quiet the stomach.

A natural question arises as to the lesson which this case teaches. It is dangerous to generalise from limited data; and as the development of this case would not influence my practice in any similar one, I can only advise you not to be too hasty in opening a hernial sac, which may be healthy and guiltless of the mischief you seek to remedy.

I have also had a case of contraction from burn, which I have attempted to relieve by a plastic operation, and of which the following is the history:—

C. H., aged 14, was admitted on November 9. When quite a young child he was severely burnt about the face, neck, and chest. I conclude, from his present state, that no effectual effort was made to stay the effects of contraction during the healing of the wound. The sight of one eye is lost, the face is much seamed, and there are radiating scars extending over the clavicles and neck, from the upper part of the sternum. But the chief seat of contraction, and, therefore, doubtless of destruction, was the neck. The chin was so tied to the chest that the measured distance between the red margin of the everted lower lip and the upper border of the sternum was scarcely an inch. The bands stretching between these points were indurated and prominent. The lower jaw was everted, tilted, as it were, forwards, so that the lower incisor teeth were nearly horizontal. Of course, the saliva constantly dribbled away, and the boy carried his head in the only practicable way, with the face directed to the ground.

He was of spare habit, with, apparently, tolerable healthy constitution. The operation, which was performed on November 24, consisted in freely dividing the entire connecting bands close to the sternum, and dissecting up the flap to the level of the horizontal ramus of the jaw. In this way the lip was completely liberated, and the flap applied to the under margin of the chin. The head could then be raised, and the contemplated division, in part or altogether, of the sterno-mastoid muscles, was not required. A flap of skin was then raised from the chest immediately below each clavicle, and destined to occupy the intervening chasm. That, on the

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right side was about three and a-half inches long, and one and a-half inches wide, that on the left rather shorter and broader. A half turn sufficed to place them in position, where they were fixed with pins and sutures. Three or four arteries, which bled smartly, required ligatures. The head was supported so as to take off tension from the flaps, and the parts were kept warm by folds of cotton-wool. I should add, that the space on either side, robbed of its skin, was closed as far as possible with pins and sutures.

For the first two days there was a profuse discharge of sero-sanguineous fluid, but no remarkable signs of inflammation. At the expiration of this time, it was evident that about one-half of the larger flap would slough; it had assumed a purple hue, with a defined margin, though it retained its temperature. On the fifth day the slough began to separate; some of the sutures, on which there was much strain, had given way, the rest were removed; the parts being carefully sustained, especially the lower lip, by strips of adhesive plaster. The discharge and general surface soon assumed a perfectly healthy character, and the entire flap and remains of the mutilated one kept their position. The boy's health was good; the head was still kept supported. At the present time the granulating process is going on healthily. The present position of the lip enables him to retain the saliva, in spite of the horizontal teeth.

I need not remind you that the texture and properties of a cicatrix are very different from those of healthy integument; in fact so altered, that one is almost justified in denying the name of skin to such an imitation of it. Yet, the most material changes are due rather to the absence of the elastic substratum of areolar tissue than to the deteriorated condition of the cutis itself. This deficiency in physical property it is impossible to supply by a new and more extended cicatrix; and, therefore, it is preferable, where it is practicable, to insert a portion of healthy integument, at the expense of a neighbouring part which can better afford to lose it. Much may certainly be effected by mechanical measures, in extending a cicatrix while it is healing; and, therefore, some operators have preferred the method of freely dividing the contracting bands, and replacing the distorted joint or part in precisely the position and condition, mechanically considered, that it occupied after the separation of the slough, and before the healing process had commenced. At best this is a very tedious process; and, as I just now observed, is not so satisfactory in the issue as where healthy skin is transplanted.

I cannot flatter myself that I have succeeded in all that I proposed to myself in this case; for I shall have to trust to mechanical extension for a considerable time, in consequence of the large space which will still have to be closed by granulation. This is not owing to insufficiency in the size of the flaps transplanted, but to the thin, ill-conditioned state of the skin employed. I am not sure that it was actually cicatrix, but it had that shining, smooth, and tense appearance which characterises skin in the near neighbourhood of a cicatrix; in fact, long subjected to an extension which necessarily attenuates and enfeebles it, and, therefore, renders it less suitable for the required purpose of transplanting. Indeed, the operation I contemplated was not that which I executed; for I had planned to fill the space with a single flap taken from over the deltoid muscle; but I was induced to deviate from this course by the unexpectedly large extent of the chasm, and the fear that a single flap—with, of course, one peduncle—would not retain its vitality. I now regret that I did not carry into effect my original proposal, nevertheless, much, very much, will have been gained by the transplanted flaps; and the present may be regarded as a case in which the two plans of treatment will be combined, and I am sanguine that the result will ultimately prove satisfactory; but it will be requisite to maintain extension by a suitable apparatus, applied so as to support the head, and rest upon the shoulders, and this must be worn at least till the process of cicatrisation is complete.

In the treatment of these cases, the thicker, firmer, and more elastic the transplanted skin, *cæteris paribus*, the better the prospect of its surviving removal and retaining a hold in its new position. I have not generally found that the borders of such a flap adhere readily to the surrounding skin to which it is freshly bound: nor do I attach importance to this, provided the surface attaches itself to the subjacent tissues. It is, therefore, important to keep the adjoining surfaces in contact, which is not always an easy matter in an irregular surface like the neck and chin. The treatment of a transplanted flap sometimes requires much discrimination, as loss of vitality may occasionally result from impeded venous circulation, as well as from strangulation by twisting, or deficient vascular supply from too narrow a peduncle. I mean that there may be an ample supply of arterial blood, but retarded return through the veins, and consequent congestion, effusion, and disorganisation from this cause. In such case puncturing the flap will afford relief. I trust that, in the case I have related, the boy's age will allow of the liberated jaw resuming its normal position and growth: but this must be a work of time. Finally, we must not expect that all contraction will cease with the completion of cicatrisation; this, we know, is not the case, and the tendency of the new texture to contract must be guarded against accordingly.

In the operation of tracheotomy which I performed a few days since on an elderly man, I met with a difficulty which I never before encountered. When the trachea was exposed, on attempting to puncture it, I found unusual resistance; and in introducing a blunt-pointed bistoury to make the necessary section to admit the tube, I was compelled to use very considerable force, and to saw my way through the ring, and even then, in the introduction of the tube on a suitable pilot-trochar, (of course, blunt,) I feared the resistance might foil me; but it was happily overcome very soon, as the poor fellow was near his last gasp. These difficulties were due to an ossific deposit in the tracheal rings, which rendered them almost as rigid as bone. Besides the laryngeal affection, for which this patient had been admitted only a few minutes before I was called to him, he was suffering from chronic bronchitis; and his dyspnœa was evidently aggravated from the accumulation of extremely viscid mucus in the larynx, and therefore above the seat of operation. The violent efforts at expectoration which were unavailing, immediately after the introduction of the tube, seemed to threaten asphyxia, until the actual cause of this condition occurred to me; and by placing my finger over the mouth of the tube, after each inspiration, he was enabled to disengage a large mass of tenacious mucus, and eject it by the mouth, with instant and very marked relief. The same cause has necessitated the removal of the tube, which, in spite of every precaution, had become impermeably blocked. Now, he is wearing a double tube, which will obviate this difficulty, by allowing of the inner one being removed and cleansed at pleasure. A pair of bent and blunt-pointed scissors would have been a good substitute for the bistoury in operating on this case.

ORIGINAL COMMUNICATIONS.

THE HISTORY AND PRESENT STATE OF MEDICINE IN CHINA.

By B. HOBSON, M.B. Lond., M.R.C.P.
Late Medical Missionary in China.

(Concluded from page 634.)

The chief hindrances in the way to the progress of Medicine among the Chinese, are, (1) The absence of all anatomical and pathological inquiry; (2) Their very imperfect symptomatology; almost each symptom is a separate disease; hence their nosological list is very large, and printed prescriptions exist for every form of disease; (3) Diseases that have their seat in the brain and nervous system, are either unknown or are very erroneously diagnosed. Apoplexy, as I have said, is called chung-fung, or wind-stroke. Paralysis is designated fung-tan, a rigid contraction from cold or damp air. Neuralgia, a pain in the tendons or muscles, etc. Diseases arising from sympathy, form no part of their diagnosis; (4) The last, but chief hindrance that I shall name, is their love of theorising and drawing deductions on mere speculation; hence every difficulty is explained, no doubt is expressed, no conscious ignorance deplored, and no hope for clearer views desired. Such a state of self-reliance and satisfaction, without any ground for it, is deplorable indeed; and as long as it lasts, it is of course fatal to all improvement. Foreign treatises on Medical Science have been given to them, which it is hoped will pave the way for changing the effete systems now in vogue; but no

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radical improvement will be effected until Schools of Medicine are formed under the auspices of the Government, and placed under the direction of foreign Medical teachers, or intelligent natives educated in foreign Medical Schools. In the many changes that are taking place in China, it is not too much to expect, that ere long there will be a Medical School established at Pekin, or some chief city in the Empire, where anatomy and other necessary branches of Medical education will be taught in a systematic manner. A few Chinese have already acquired some knowledge of ophthalmic diseases and ophthalmic surgery; and show neither want of disposition or ability to acquire readily all that is taught them, and to perform with dexterity the smaller operations in surgery, etc. A difficulty is often felt, however, from the want of English, on the part of the student, to understand the foreign teacher, or the want of the necessary Chinese, on the part of the instructor, to impart the information desired.

Hospitals and Dispensaries for the benefit of the sick have been opened at different places for many years past on the coast of China. Dr. Colledge, now of Cheltenham, then Surgeon of the East Indian British Factory in China, was the first, I believe, to administer to the wants of the suffering Chinese. He opened an Ophthalmic Hospital at Macao in 1827, which afforded much relief to the many blind and indigent persons that applied for foreign Medical aid. Letters abounding in gratitude for sight received, were sent to the benevolent Proprietor of the Institution. Mr. Gutzlaff, the well-known missionary, succeeded by the aid of Medicine (though his knowledge of it was small) in gaining a friendly admittance to many places on the coast never visited before by any foreigners. The Rev. Dr. Morrison also employed at his own expense an intelligent native practitioner to heal the sick gratuitously, and, to a certain extent, it answered its purpose. Subsequently, public attention was drawn to the desirableness of engaging properly educated Medical men in England, to aid by their knowledge of Medicine and skill in Surgery the advancement of Christian Missions in the secluded empire of China. Considerable doubt, however, was expressed whether any would be found ready to forego home advantages and comforts for foreign service in the missionary field, and go out in the same capacity as missionaries, having the same income, and faring precisely in the same manner. The advertisement of the London Missionary Society was, however, responded to (to the honour of our Profession be it said) by several suitable individuals; out of these two were selected, and they left these shores for China in the years 1838-39. The United States had sent one or two ordained missionaries acquainted with Medicine previous to this date. Since then others have followed their example, and now there are some scores scattered over China, Japan, India, Africa, Turkey, and other places, who are "healing the sick and saying unto them, The kingdom of God is come nigh unto you." In this country it is usually considered better to keep the two Professions distinct; but in America, the conjoining of the two Professions in one person for missionary work abroad seems to be preferred. Of course it is impossible to be perfect in both. The object, however, is one; and, whether healing or religious teaching is the more prominent duty, a tribute is laid upon Medicine to be employed as an auxiliary to the higher work of the missionary. In this way Medical science is ennobled by promoting the introduction of Christianity in heathen lands. Antipathy of race is strongly felt both in India and China, but they cannot exclude disease; and with all their prejudices, every barrier is removed rather than not receive the benefit of foreign Medical skill. Even the secluded ladies of the East forget their shyness and timidity, and come from long distances to have a tumour or a cancerous breast removed; and better patients could not be found, for the healing processes are most favourable, and Medical directions are implicitly followed, under judicious treatment.

I will only add, that considerably more than half-a-million of Chinese, during the last twenty years, have received gratuitous Medical assistance from English and American Medical missionaries in China. The good that has been done in this way alone, by alleviating much human suffering, has been very great, and the indirect benefits are incalculable. The Hospitals and Dispensaries that have been in operation have not needed to beg for pecuniary aid. All their incidental expenses have been readily defrayed by the mercantile community residing at the ports in China. The poor, the maimed, the blind, the deaf, and the lame, were found there daily; and accidents and casualties were received and attended to at any time; a large number of copies of Holy Scripture, religious tracts, and treatises on astronomy, medicine, etc., were widely diffused by the patients on returning to their different hamlets and homes. Preaching by the missionary (foreign or native), and healing of the sick (labouring under all forms of disease), by the Medical man, have gone hand-in-hand together most harmoniously; and if one thing more than another has served to conciliate the good will of the people, and recommend to their regard the sublime truths of the Bible, it has been the working of such an institution as this, in the manner specified above. If room permitted, I could adduce several striking instances in proof of this assertion.

The Edinburgh Medical Missionary Society, true to its name and its broad catholicity, is still doing much good in diffusing interesting information, both by its reports and occasional papers, concerning Medical missions in all parts of the world; and also in encouraging and assisting Medical students to devote themselves to this benevolent object. It wholly sustains an able Surgeon at Madras, and gives medicines and instruments to those who apply for them, etc. It deserves fuller support from the Medical Profession of the United Kingdom than it has hitherto received. Contributions on a more liberal scale are required to sustain its operations. A strong appeal is made by the honorary secretaries to recruit its exhausted funds.

The writer of this communication naturally shrinks from making more than a distant allusion to himself; yet this part of our subject, on the efforts that have been made to give the Chinese a rational system of medicine, seems to demand at least a short reference to the Medical publications that have been issued by the author to promote the benefits of the healing art in China. The first treatise was a digest of the well-established truths of physiology, and was published in 1851, illustrated with numerous engravings, first from stone, and afterwards from wood, all done by the aid of Chinese artists on the spot. The bony, muscular, and nervous systems, and the senses, are first described; then the digestive, circulating, and respiratory organs and functions, including a short history of man; closing with remarks on the unity, wisdom and design of the great Creator. The subject was so entirely new to the Chinese that it soon became a popular book, and was republished by persons holding high official rank in Canton, which was considered an unusual mark of respect to the author and his book. The following is a translation by his relative, Mr. C. Morrison, from a recommendatory notice in Chinese:—

"'A Western writer, Hobson, has published a Treatise on Physiology, with illustrations, in which the subject is thoroughly elucidated. He first gives a general description of the entire body, and afterwards treats of its various parts separately. The illustrative figures are 271 in number: they were lithographed at the Free Hospital at Kum-le-fow in Canton. These I have arranged, after the originals, on eight scrolls, which may be hung side by side, and so be conveniently studied; and they will be very suitable for presents. To persons desirous of acquiring the healing art, they will give a complete insight into the internal and external structure of the body, and the principles of its organisation, and possess them of the means to obtain a true diagnosis of diseases. They are properly characterised in the following terms,—

"'The myriad processes of life are here displayed, and the human frame is opened to view. The internal and external organs are distinguished, and accurately delineated. From the form the nature is demonstrated: what appears anomalous is shown to be well-ordered. It is the first time that we have beheld such productions. Our science indeed cannot compete with that of the philanthropic author.

"'By Yeh Suy-ung; from the palace of the Governor-General of the Two Kwang Provinces, in this 8th autumnal month of the third year of Hien-fung.'"

This which succeeds was translated by Harry Parkes, Esq., H.M. Consul, from the preface of another editor, and is a good illustration of Chinese modes of thought. The unheard-of skill of the Mongolian Physician will excite a smile at the writer's expense: he wisely expunged this and all that follows in a subsequent edition, as they exposed his ignorance and conceit to ridicule:—

"Those doctrines of the faculty which date from the works of Tung Wan, surnamed Le, and which were disseminated

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by Lo Keënfoo, through Chëkeëng and the Keëng provinces, are known as the Southern School of Medicine; and those which originated with the writings of the Tan-ke surnamed Choo, and were spread by Lew Kwang-how throughout Shanse and Szechuen, are called the Northern School;—in the same way as we number in the north and south two different denominations of Budhism, or distinguish between the Southern and Northern Schools of painting. Again in Medicine, we have the Eastern School, which dates from the introduction into China of the 'Precious Mirror,' a work by Heu-tseuen, Prince of Yang-ping in Corea, for it has not been thought right to exclude writings adapted to the use of posterity, because emanating from a remote and obscure foreign quarter.

"The people of the West have a quick and ingenious current of thought, and are fond of discussing abstruse or scientific subjects; their different writings on Astronomy and Mathematics have long been received in China as standard works, and the Medical Science is the only point on which we have hitherto remained uninformed. In the commencement of Keäking's reign, the European Physicians introduced among the Chinese their art of vaccination, and more lately they have opened Hospitals at Canton for the treatment of diseases, so that nc objection can be taken to our now naming them the Western School, in addition to the Eastern spoken of above.

"This new treatise on the human body is written by Hobson, a Western Physician. Whenever, in his country, a person dies of an unusual disease, it is imperative on the Surgeons to open the body of the deceased, examine all the internal parts in order to ascertain the cause of death, and experiment with various medicines how the disease could be cured; we know, therefore, for these reasons that some benefit may be derived from this book. The order in which it is arranged is similar in some respects to that of the illustrated work of Wang Wei-tih of the Sung dynasty, descriptive of a copper model (a) of a human being; its notices are limited to the anatomy of the human body in its original or sound state, and the treatment of diseases is not entered upon. For as the art of healing disorders, whether they be of an internal or external nature, consists simply in restoring the whole frame to its original condition, it follows that a knowledge of this subject, aided by deep study and careful thought, will ensure the acquirement of the requisite skill of the Practitioner.

"Although this book is entitled a 'New System,' it is not to be supposed that all which it contains is new to us. Thus the argument that the brain is the seat of the human understanding may be judged to be credible by the case of Tse Tsze-fung, a Doctor of the Hanlin College, which is related in the prose and poetical works of Woo-ting. At one time he possessed such an extensive learning and so powerful a memory, that he was called a walking library. Having fractured his skull by a fall from his horse, a skilful Mongolian Physician replaced the injured part of his cerebrum with a portion of the brain of a cow, and so far saved his life; but the accident occasioned the utter prostration of his eminent powers of mind, and he became from that time forward a wholly different man to what he had been before.

"Those parts of the book, on the other hand, which expressly contradict the doctrines of Ling-keu and Soo-wan (b) serve only to prove the partial and narrow bent of the writer's views, and the one-sided nature of his reasoning. Take, for instance, that passage in which he states that the moral qualities of courage and decision have no dependence on the size of the gall-bladder. Is he ignorant that this fact, according to the old writings, was ascertained by post-mortem examinations? Or would he maintain that proof is only to be deduced from the post-mortem examinations of his own country, and that those held in China are not sufficiently trustworthy for the verification of facts? Again, in regard to his theory of the circulation of the blood, and of the different forms of the fœtus, during the several stages of pregnancy, how, may we ask, could any post-mortem examination have shown him the blood flowing in the veins of a corpse, or have enabled him to ascertain the age of the uterine formation? All that he says on these subjects is, therefore, distorted and erroneous.

(a) The copper model is still said to exist in Pekin, but is extremely unlike the object it is intended to represent.

(b) Who are said to have lived prior to the Confucian era

"Still, as the writer is able to study Chinese works, and to inform himself of the excellent instruction they contain, we may assume that what he advances is not entirely without foundation. He says, on his part, 'I think so and so,' and no harm can come, on our part, from our giving him a hearing. Viewed as a means of opening up new trains of thought, and stimulating the mind to understand the mode of curing disease, the book itself can scarcely fail to be of service to the members of the Profession, and on this account, therefore, I have been induced to give it a place in my collection, and have endeavoured in these prefatory remarks, to indicate briefly its merits and defects. Written by Tih-yu, the proprietor of the Hae Shan-Seen Kwan, and dated on the 8th day of the 12th month of the 1st year of Heënfung."

That a work of this kind was much needed is at once apparent. They have some ancient anatomical plates, but they ignore all description of arteries, veins, nerves, glands, etc., and give only a rude outline of the general form and situation of the viscera. It appears as Dr. Lockhart says, in describing an anatomical plate, "as if some person had seen an imperfect dissection of the interior of the body, and then had sketched from memory a representation of the organs, filling up parts that were obscure out of his own imagination, and pourtraying what, according to his own opinion, the parts ought to be, rather than what they in reality are." This work was succeeded a few yeaas afterwards, by one on Surgery, a large octavo volume, with upwards of 400 illustrations on wood, which were carefully copied from Liston, Fergusson, Erichsen, Druitt, and others. This was followed by a practical treatise on Midwifery and Infantile Diseases. Surgical operations are never performed by Chinese doctors, nor do they attend women in labour. This is women's work; and if there should be a cross-birth, hæmorrhage, or other untoward accidents, the parturient woman usually dies.

These two works, therefore, were intended principally to be a hand-book for Medical students and others; and also by their exposition of western art and science, to suggest, and encourage the Chinese Government to do something in the way of public schools and examinations in Medicine, as it has long done for the benefit of letters. The fourth work was on the Principles and Practice of Medicine, with a digest of the British Pharmacopœia, adapting the treatment of disease to the climate and habits of the people. To aid the better understanding of the new views put forth in these treatises, the chief properties of air, light, heat, electricity, and water, were explained, and attached to a volume previously published on astronomy and the history of mammalia. These five works were not translations of any one English work in particular, but were rather selections from many works on the same subjects, adapted to use. Those, however, more specially used were Dr. Carpenter's Physiology, the Surgeon's Vade Mecum, Dr. Churchill's Midwifery, Dr. Watson's Practice of Physic, Dr. Arnott's Works, and Dick's Solar System.

In conclusion, it is a pleasing circumstance to be recorded, that not only have the above works been extremely well received by the Chinese, and circulated far and wide through the Empire (especially the one on Physiology), but the whole of them have been carefully reprinted at Yeddo and Miaco, in Japan, in fourteen thin octavo volumes, eleven of which have been received in this country; which speaks well for the interest the Japanese Government and private individuals feel in these subjects. Under the direction of a Dutch Physician, executed criminals are occasionally given for dissection for the use of his pupils,—an innovation upon the customs of the people, that has only been sanctioned for the last year or two. It is a noticeable fact, also, that these books are published in Chinese with Japanese interlineations, showing how extensively the written language of China is known to the learned beyond the precincts of that Empire. No advantage arises to the author in any way beyond the satisfaction of having contributed his mite to the general good of mankind in the far East. It is only fair to state, that he is much indebted for the success of these works to the very perspicuous style of composition of two accomplished Chinese scholars, who assisted him in their production. He feels also constrained to acknowledge the liberality of British and American merchants in China, who by their free contributions aided him in printing and publishing a large edition of them for general circulation.

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SUGGESTION FOR

A MODIFICATION OF WOOD'S OPERATION

FOR THE

RADICAL CURE OF HERNIA.

By A. G. FIELD,
Surgeon to St. Mary's Hospital, Brighton.

HAVING applied Wutzer's method of treatment to many cases of reducible hernia, with the usual gratifying immediate results, but having also met with the usual amount of subsequent disappointment, I hailed with delight Mr. Wood's improvement, and lost no time in putting it in practice; and the results have been most satisfactory. Though I have repeatedly performed Wood's operation, in no case (save one, that of a child who could not by any means be kept quiet,) has the hernia descended. In all my first cases the directions laid down by Mr. Wood were accurately followed; but lately I have adopted a modification which I think presents some advantages. This consists in cutting away a circular patch of skin from the scrotum, instead of separating it by subcutaneous section, as practised by Mr. Wood; and the advantages of this proceeding appear to me to be evidently these:—

1st. The operation is more easily executed, and the subsequent steps are more clearly under the eye of the operator.

2nd. There is less surface to heal.

3rd. The enlarged scrotum is diminished to it natural size.

4th. More effectual support is afforded to the invaginated superficial fascia when the edges of the wound are united by suture.

To a looker-on the operation has rather a more formidable appearance than when the skin is merely detached from the superficial fascia, and allowed to remain; but it is evident that less is left for Nature to do afterwards during the healing process.

28, Old Steine, Brighton.

REPORTS OF HOSPITAL PRACTICE

IN

MEDICINE AND SURGERY.

CONDUCTED BY

JONATHAN HUTCHINSON,
Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital.

A

CLINICAL REPORT ON TRUE RINGWORM (TINEA TONSURANS).

(Concluded from page 14.)

Cases 18, 19, *and* 20.—*Ringworm of the Scalp in Three Children of the same Family—Forehead affected in one instance.*

Martha A., aged 7, Mary Ann A., aged 5, and Robert A., aged 3, all of fair complexions, and all in very good health. The disease had first shown itself in Mary Ann, and the others caught it from her. No contagion was known in the first instance. The patches were scattered over the scalps, and in one instance the skin of the forehead was affected. The microscopic features of the disease were very well marked.

Case 21.—*Ringworm on the Scalp in a Healthy Child.*

Adelaide L., aged 8, of fair complexion, well fed, and in good health. She was supposed to have caught ringworm at school. The patches were first observed a fortnight before, and there were now three on the vertex of the head, the largest the size of a florin. The broken hairs presented the usual features under the microscope.

Case 22.—*Ringworm on the Scalp of a Healthy Boy.*

Arthur A., aged 6, in good health. No history of contagion. There were patches on various parts of the scalp, and the disease had existed about a month. The microscope showed the usual conditions.

Case 23.—*Ringworm on the Scalp—Contagion to a Sister.*

Annie H., aged 15, of fair complexion, in good health. She was believed to have caught the disease at a boarding-school, and a sister was said to have since contracted it from her. The patches had been present for two months, and affected the arms, back, and chest. There were none on the scalp, but in the sister they had shown themselves there only. Most of the patches were round, and owing to their having become nearly sound in the centre presented the true ringed form. The microscope showed sporules in the epidermic scales and small hairs from the patches.

Case 24.—*Ringworm on the Scalp in a Delicate Child—Cure by Creosote Ointment.*

Charles W. B., a pale and delicate child, aged 13 months, was under my care at the Metropolitan Free Hospital, in July 1859, for true ringworm of the scalp: it had existed sixteen weeks. His father had often been under my care for tertiary syphilis, but the primary disease was 8 or 9 years distant, and there were five children living older than the patient. The ringworm soon got well under the use of the creosote ointment.

Case 25.—*Ringworm on the Forehead.*

William H. S., admitted November 2, 1859, with patches of true ringworm on the forehead and temple. No patches on the scalp. The disease had existed two months. Ordered ung. creasoti.

Case 26.—*Ringworm on the Neck.*

Mary M., aged 20, a servant, admitted August 19, 1859, with a large diffused patch of ringworm on the left side of neck. No contagion known. It had existed two months.

Case 27.—*Ringworm on the Neck.*

William C., aged 8, of brown complexion, admitted December 10, with a large almost circular patch of ringworm on the neck, a little encroaching on the margin of the hairy scalp. No patches on the scalp itself.

Case 28.—*Ringworm on the Arm and Hand of an Adult.*

Charlotte S., aged 28, of dark complexion, and in excellent health, applied on account of two round patches of ringworm on her left forearm and back of hand. She did not know how she had caught the disease. There were no patches on the scalp. The patches had, she said, began as points which had rapidly extended all around. They were now as large as half-pence, she complained of a good deal of itching, but there were no other symptoms.

Case 29.—*Ringworm Patches on the Face of an Infant.*

Charles H., aged 20 months, a pale delicate infant. The ringworm patches, of which there were several, were on his forehead and face. There were none on the scalp. The disease had existed only two weeks. No history of contagion was given.

Case 30.—*Ringworm in Large Patches on the Scalp—History of Contagion among several other Children.*

William B., aged 5, of light hair and fair complexion, but in good health, was admitted with large diffused patches of ringworm on his scalp, which had existed for six months. Three of his brothers and sisters had had the same affection, but had got well under the popular treatment of painting with ink. The patches were diffused and almost covered his scalp.

Cases 31 *and* 32.—*Ringworm of the Scalp in Two Brothers.*

Of these cases I have no further particulars than that John and Edward H., aged respectively 4 years, and 18 months, were brought at the same time on account of patches of true ringworm. In both the disease was of recent origin, and confined to the scalp.

Case 33.—*Ringworm on the Scalp and Buttock.*

Emily D., aged 5, of dark complexion, and healthy-looking. Some children who lived near her home were known by her mother to suffer from ringworm. The disease in herself consisted of patches on the scalp and one on the nates, in all of which the usual features were well marked.

Cases 34, 35, *and* 36.—*Ringworm on the Scalp and Shoulders in Three Children of the same Family.*

James N., aged 10, Mary Ann N., aged 17, and George N., aged 4, all applied together on account of ringworm. The disease had first showed itself six weeks before on the scalp of James, a week later a patch was found on the shoulder of his sister, and a little later it appeared also on the shoulders

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of the younger brother. In neither of the two latter had the scalp been affected. All the patients were in good health, and the disease in all presented well-marked features.

Case 37.—*Single Patch of Ringworm on the Chest.*

In this case a young prostitute who came under care for gonorrhœa, had also a patch of well-characterised ringworm on her chest. There were no patches on the scalp. Her age was only 16.

Case 38.—*Ringworm on the Scalp of an Infant.*

Edward J. H., an infant of 13 months, came under care for ringworm of the scalp of three months' duration. The disease presented its usual features.

Cases 38 *and* 39.—*Ringworm on the Scalp in Two Brothers.*

George W., aged 3½ years, and John W., aged 17 months. Both the children were of fair complexion, and both were in excellent health, and free from the slightest manifestation of struma. The elder brother had caught the disease at school, and the younger one from him. It had first been noticed in the elder two weeks before. In both it affected the scalp, and in the older brother there were patches on the shoulders also. The patches were treated with the blistering fluid, and in a few weeks were well.

Case 40.—*Single Patch of Ringworm on the Back of an Infant.*

James O., aged 4 months, a very healthy infant, was admitted with a single well-characterised patch of ringworm on his back. It had existed three weeks, and was not known to have spread to any of his brothers or sisters: it was, however, quite covered by his roller. On microscopic examination of epidermic scales scraped from the patch, I found but very few sporules. The patch was blistered, and was soon well. I saw him two months later for another complaint, and then ascertained that he had never had any return of the ringworm.

Case 41.—*Ringworm of the Chest and Arms in a Healthy Girl —Microscopic Examination.*

Caroline R., aged 14, a stout, healthy girl of brown complexion, rather florid, was admitted on April 3, 1860, with ringworm on the neck, chest, and shoulders. There was no history of known contagion. The patches had itched a good deal whilst coming out. The first of them had been noticed only a week before, and they had rapidly spread, being now ten in number, and as large as halfpence. Several of the patches showed minute vesicles at their margins, and in all the edges were considerably raised above the general surface. The patches, although affecting both sides of chest and both arms, were quite unsymmetrically placed.

Microscopic Examination. — The hairs and epidermic scales removed by scraping from the patches, showed the cryptogam in great profusion of growth. The hairs were, however, but sparingly and exceptionally attacked. In several instances a healthy hair was seen passing through an adherent mass of epidermis in which numerous thalli and sporules were present. In other instances the hair-shafts had been infiltrated and broken off short. In one or two instances, as shown in the woodcut given below, the hair-bulbs contained sporules. I have seldom, if ever, seen the thalli so long and so abundant in proportion to the sporules as in this instance.

Treatment.—Some of the patches were treated by the application of lunar caustic (in stick) very freely, and others by blistering with Bullen's vesicating fluid. None of those blistered required a second application; whilst in several of the others subsequent treatment was necessary.

Case 42.—*Ringworm on the Cheek.*

Charles R., a pale and delicate boy, aged 6, was brought to the Hospital on account of a large patch of ringworm on his cheek. It was quite round, had spread rapidly, and covered almost the whole cheek. He had no patches on the scalp. The disease presented its usual features.

Case 43.—*Ringworm on the Shoulders and Back.*

Mary Ann R., aged 12, in fair health, but the subject of dislocation of one hip consequent on disease in the joint (without abscess), at the age of four. She applied on account of numerous patches of ringworm on the shoulders and back. They were about the size of sixpences, but many of them were confluent. There were none on the scalp. The disease had existed a fortnight, and no contagion was known.

Case 44.—*Ringworm on the Hand.*

James W., aged 10, applied with a single large patch of ringworm on his right thumb and adjacent parts of palm and back of hand. It was abruptly margined, and had a raised edge. There was no history of contagion.

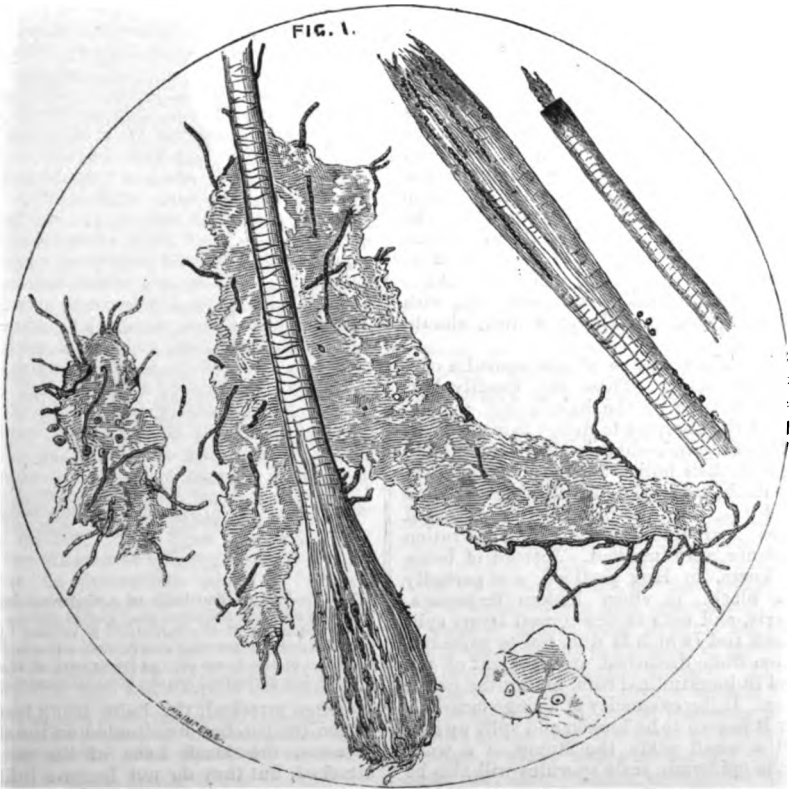
Case 45.—*Ringworm on the Scalp.*

George G., aged 10, applied on account of two patches of ringworm on his scalp of about a month's duration. A few months before he had attended the Hospital for Skin Diseases for the same disease, and had apparently been cured. Probably some small patch had been overlooked, and proved the cause of the relapse. The patches presented their usual features.

Case 46.—*Ringworm on the Cheek.*

Alfred D., aged 17, of dusky aspect, as if from imperfect aëration of blood, applied on account of a single patch of ringworm in his left cheek. There was nothing peculiar about his case.

FIG. 1.



Case 47. — *Ringworm on the Scalp, Complicated with Common Porrigo.*

Joseph W., aged 5. On his scalp was a single large patch of true ringworm: it had existed ten days, and was surrounded by the purulent crusts of common porrigo, which had shown itself subsequently. Both eruptions were well characterised. One of his sisters had ringworm also.

Cases 48 *and* 49.—*Ringworm in Two Healthy Children Contagion to both Parents — Eruption confined to the General Surface, not on the Scalp.*

Anne C., aged 4, and Martha C., aged 2, admitted with large patches of well-characterised ringworm in the body, arms,

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face, and legs. Both were in good health. The elder child was believed to have caught it at a school. In neither were there any patches on the scalp. Their father had a single patch on one thigh, and their mother showed me one on her breast. The patches were stated to itch so much that they could not sleep. In the boy, the patches were acutely inflamed and almost ulcerated. One which was situated in the meatus of one ear had caused purulent discharge.

With these cases I conclude the citation of facts. Many of the cases in the latter part of the series are very briefly given, but in order to secure statistical completeness, and to give a fair picture of the disease as it really occurs, I have preferred not to omit any. The last twenty-six are all the cases which have come under my care at the Metropolitan Free Hospital during a period of nearly eight years. During the same period I have registered probably about a thousand cases of common porrigo on the scalp in children, and in this fact we have, I believe, a fair statement of the relative frequency of the two affections. The Hospital in question allowing of free admission (*i. e.*, without letters of recommendation), and being largely frequented, is one, in the out-patients practice of which, large numbers of these slighter diseases might be expected to come under notice. There can, therefore, be no reasonable doubt, when we find that only twenty-six have been registered during so long a period, that true ringworm is a comparatively infrequent disease among the London poor.

With regard to the state of health of the patient, age, sex, temperament, and part usually affected, both the cases from the Hospital for Skin Diseases and those from the Metropolitan Free are reliable, since in the collection of both series I took every case which presented itself during the period that I was engaged in collecting them. I shall, therefore, now proceed to examine as to what inferences on the points mentioned may be fairly based upon the facts adduced.

Diagnosis.—The diagnosis of ringworm to the practised eye is not usually difficult. Its patches differ from those of eczema, impetigo, and common porrigo, in that they have no inflammatory crust, only a thin branny desquamation being present. In the latter, the hairs are not destroyed, but simply matted together in the crust, while in ringworm they are broken off short. The roundness of its patches, and their abrupt definition, together with the paucity of scales, distinguish it from all the forms of psoriasis; and the latter are besides very rare on the scalps of children. In alopæcia circumscripta the patches are glabrous, quite destitute of hair, and free from even the smallest scales. In some cases in which ringworm departs from its usual type—for instance, if attended by inflammation—its differential diagnosis becomes difficult. In all such cases the appeal is to the microscope. To make a satisfactory diagnosis with the microscope the hairs from the patch should be carefully pulled out with tweezers, and some of the branny scales should also be scraped off. These should be put into a drop of glycerine on the microscope-slide, and covered in the usual manner. The addition of acetic acid renders the hair-structure more transparent, and the sporules therefore more conspicuous, but glycerine is usually quite sufficient. After observing the general size of the hair-fragments, etc., with a half-inch object-glass, a quarter-inch, or a fifth, should be employed.

Microscopic Diagnosis.—The presence of the sporules of a fungus is an essential character. These are usually best seen in groups on the outside of the hairs; but a little practice will soon enable the observer to detect them in great numbers in the interior of the hair-shaft itself. If any hairs have been pulled out with their bulbs the sporules may most probably be seen very distinctly in the lower and less opaque part of the latter structure. But the peculiarities presented by the hairs themselves (apart from the actual demonstration of parasitic elements) are very marked. Instead of being round, of regular thickness, in long portions, and partially translucent, they are black, in short broken fragments, swollen, bulging at parts, and with their external layers split off in places. The black tint (which is due, not to pigment, but to altered refraction from disturbed arrangement of the hair-fibres) is arranged in longitudinal bars, giving the hair a fasciculated appearance. If the extremity of a ringworm-hair is brought under view it is seen to be broken and split up into fibres, resembling on a small scale the stump of a worn besom. In, and on, the epidermic scale sporules will also be found. It is consistent with my own observation, that the younger the patient the more likely is the disease to be

Fig. 2.

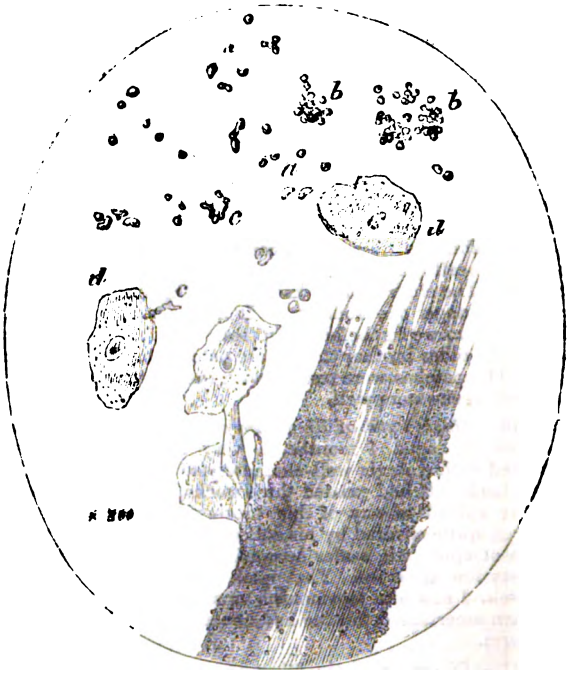

Fig. 2.—*a*, detached sporules; *b*, sporules in coherent groups; *c*, sporules coherent in their extremities in the form of a branched stem; *d*, epidermic scales. In the lower part of the sketch is a portion of infiltrated hair from the same patient. The sporules in it are of smaller size than those which had grown on the epidermis.

restricted almost solely to the hairs of the scalp, whilst in those beyond the age of about ten years, the epidermic scales

Fig. 3.

Fig. 3.—The swollen bulb of a ringworm-hair highly magnified (600). Sporules are seen scattered singly or in groups throughout the bulb. The black condition of the hair-shaft is caused by its being crammed with sporules: the latter may also be seen adhering to its cortex. The curved direction of the fibres on the lower part of the bulb is due to the latter (softened in glycerine) having been accidentally folded on itself.

are often attacked, the hairs being less extensively affected. When the patches are situated on the skin of the trunk, neck, or anus, the small hairs of the part are almost always attacked, but they do not become infiltrated in the manner

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so often seen on the scalp, nor do they usually break off. In these regions the disease is primarily one of the epidermis rather than of the hairs.

Fig. 4.

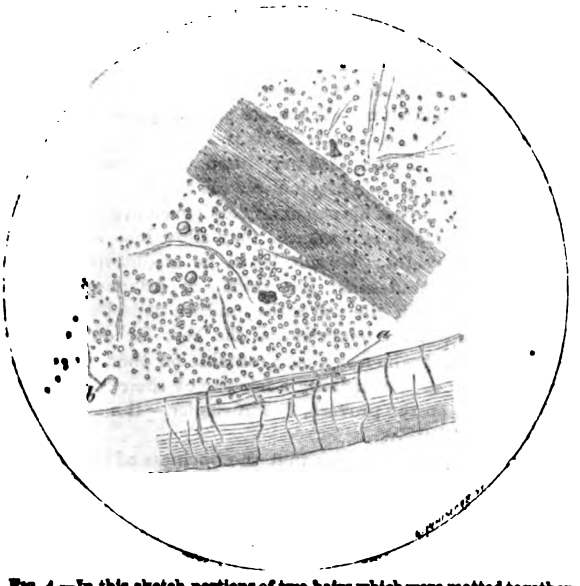

Fig. 4.—In this sketch portions of two hairs which were matted together by ringworm crust are seen. One hair is infiltrated by sporules, but the other is sound, excepting in one part, where the fungus appears to have recently attacked its cortical layers.

Is True Ringworm Contagious?

The popular belief in the extreme contagiousness of ringworm is of old standing, very firm, and very widely spread. It is also supported by the experience of most dermatologists. One or two authors, however (after giving descriptions by which it is placed beyond doubt that they were writing about the disease in question), deny its contagious properties. Thus, one authority writes: "This disease is not contagious;" and adds, that "it is not communicable by inoculation." I am not aware that any evidence is on record supporting the view that it is not inoculable, while there are many facts conclusively proving the opposite (a). The experiment is one easily tried, and on such a matter the *onus probandi* certainly rests with those who deny it. Mr. Erasmus Wilson, after broaching the theory that the supposed cryptogamic sporules are in reality oil-globules, the result of fatty degeneration of the hair-shafts, has the following extraordinary passage; (b) — "Another consequence naturally follows the admission of the explanation here given, which is, that this disease being inherent in the hair, and being due to an abnormal nutrition of the system, *is in nowise contagious*. I need scarcely observe, that this is a question of the utmost importance as affecting the peace and happiness of families and the education of youth. The disease occurs as commonly among the children of the wealthy as among the poor; and when the idea of contagion is entertained the scourge is rendered doubly severe." Thus it would appear that a theoretic conjecture as to the pathology of the affection is to decide this important question, there being no need for clinical investigation as to what is really the fact. Let me ask anyone who has glanced ever so cursorily over the cases I have cited whether he would like to try to "secure the peace and happiness of a family," or "promote the education of youth," by assuring an anxious mother, or the head of a children's boarding-school, that the disease in question cannot spread by contagion, and that no precautions need be taken? The clinical proof of the contagiousness of true ringworm is as conclusive as is that of similar nature in respect to scabies. When we see a disease in itself slight and easily curable by local means, suddenly showing itself in five or six individuals in the same family of different ages and states of constitution, and none of whom were ever liable to it before, it is surely futile to allege that constitutional causes are sufficient to explain the occurrence. The case is yet stronger, if possible, when the affected children belong to different families; and it culminates when we find that the disease has spread to the neck and hands of the mother or nurse of the patient. To assert that a disease is actively contagious under assisting conditions is quite a different thing from alleging that it will inevitably affect everyone who touches the patient. It is not at all infrequent to witness scabies confined to a single individual in a family, although the exposure may apparently have been considerable. In my report on favus I showed that although undoubtedly capable of spreading by contagion yet the fungus of that disease is difficult to transplant and will not grow on a new soil unless precautions be taken to give it a fair chance. The fungus of ringworm is much more easily transferred from one to another, yet it also may well be supposed to require certain conditions (*i. e.*, a soft skin or succulent hairs and a fair opportunity of access) in order that it may implant itself.

Is Ringworm a Constitutional Disease?

With regard to the question as to whether any constitutional predisposition exists in cases of ringworm, it has already been answered by the facts adduced as to contagion. These facts are of the same nature in scabies and in ringworm. In both these, the invariable presence of a parasite has been proved; both are curable easily by local means, which destroy the vitality of the parasite; both are easily contagious; both are constantly seen in the most healthy individuals. It is impossible to believe that any form of dyscrasia can produce scabies, and it is equally inconsistent with clinical evidence to hold that ringworm can be produced by such causes. That scabies is a much more severe disease in some individuals than others is well known, and the same is no doubt equally true of ringworm. In the first place, early age, which involves softness and succulency of the cutaneous structures, predisposes to both, or rather it would be more correct to say, that advancing age *pari passu* protects from both. Both are attended with a greater amount of irritation in those of fair complexion, and probably, both are more liable to occur in such. But to admit this is a very different matter to admitting that the strumous diathesis, or any other form of general ill-health, predisposes to them, and in support of the latter suspicion there does not exist any evidence whatever.

Identity of Ringworm on the Scalp with Ringworm on the General Surface.

The great frequency with which ringworm occurs in the same individual, both on the scalp and on other parts of the surface, and the common occurrence of the disease in these different parts in different individuals of the same family, from mutual contagion set at rest any doubts which might have been felt as to the identity of the affection. Every now and then, even in young children, we see cases in which the disease appears to avoid the scalp; but this is probably explained by some peculiarity of the hair in such individuals. The hair of the scalp in adults appears to be proof against the inroads of the fungus and in them we always see the patches on the skin of the chest or arms. It may easily be supposed that the hair-structure in different children differs considerably as to the hardness of its cortex. When the patches occur on the skin of other parts, the fungus usually attains a more luxuriant development than when on the scalp. This is shown in Figs. 2 and 3. The small hairs of the chest on the affected parts, are usually attacked by the fungus, but are rarely infiltrated extensively. The ravages are much more superficial than on the scalp, and for that reason the cure is much more easily effected. Upon the question of the identity between ringworm and some forms of sycosis I shall not here enter.

Treatment.—From time immemorial, it has been customary to employ various local irritants for the cure of ringworm. Ink is the favourite application of mothers, and is a scientific and frequently successful remedy. At the Hospital for Skin Diseases, Mr. Startin always blisters the patches with the vesicating fluid. A single blistering is usually sufficient for patches on the skin, but those on the scalp often require two or more. Many Surgeons employ nitrate of silver in solid stick. M. Bazin insists strongly on epilation as a means of

(a) It is desirable that those engaged in the microscopic examination of ringworm products should be careful lest they inoculate themselves. This accident once occurred to myself, and I had a large, well-characterised patch on one side the neck.

(b) "On Diseases of the Skin." Second Edition, p. 419.

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cure, and there can be no doubt that it is an extremely important one. By removal of the affected and adjacent hairs, we can reduce a ringworm patch on the scalp to the same condition as one of the general surface, thus rendering it much more accessible to the influence of parasiticides. Of the latter it probably does not matter much which we select. The creosote ointment is a very good one, so also is the application of strong acetic acid. The great point in treatment is to keep clearly in mind that the destruction of a vegetable parasite is the object aimed at.

It is needless to point out how strongly the fact that ringworm is curable by local means supports the opinions held in this report as to its purely local pathology.

The conclusions respecting the disease under discussion, to which our facts seem to point, may be conveniently summed up as follows:—

CONCLUSIONS.

1. True Ringworm, or Tinea tonsurans, may be defined as a disease affecting either the scalp or the general surface, in which circular patches are formed, on which the hairs break off short, and a slight, branny desquammation is seen, both hairs and epidermic scales exhibiting under the microscope the sporules and thalli of a fungus.

2. Ringworm in the scalp is rarely seen, excepting in children; but on the general surface is not very unfrequent in young adults.

3. It is contagious, and spreads by contagion only.

4. It is not attended by any peculiar form of dyscrasia, but on the contrary, often attacks children in perfect health.

5. It is much more easily curable on the general surface than on the scalp, owing to the circumstance, that in the latter situation the fungus has obtained access to the follicles of the hairs.

6. Being a purely local disease, ringworm does not require, *per se*, any constitutional treatment.

7. A purely local treatment, if efficiently pursued, is always, and rapidly, successful.

8. Epilation, and the use of one or other of the known parasiticides, are the measures of treatment required.

9. There is no real difference between ringworm on the scalp, and ringworm on the general surface.

10. Ringworm, although not unfrequently causing minute vesicles, has no true analogy with herpes.

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Medical Times and Gazette.

SATURDAY, JANUARY 12.

PROFESSION *versus* TRADE.

WE again take up the subject opened in our leading article last week, and propose to show the advantages of a transfer of the whole body of General Practitioners to the *clientela* of the College of Physicians, provided only that the transfer be effected peacefully, legally, and by consent.

The object is to raise the whole body in public estimation; to increase their influence; to enhance the value of their services and the remuneration which follows, and to remove from those services what we venture to call the taint of trade.

Not that trade in itself is degrading. To despise trade or tradesmen, is a sign of the meanest and most narrow-minded spirit. But there is in a profession, practised rightly, a sentiment which puts it at once upon a moral level higher than that of trade; and it is this, that the advice given, and the services rendered by a professional man, must be absolutely such as will be most beneficial to the client; and that they must be absolutely unbiassed by any selfish instincts on the part of the adviser. When we go to a professional man we ought to feel that he advises as if the case were his own. The tradesman, on the contrary, often considers himself at liberty to press the sale of goods for his own benefit, without regard to the wants of his customer; and, even in giving advice as to the course to be pursued, may allow his own interest to have some weight. Do not let us be misinterpreted into saying that all tradesmen give selfish or dishonest advice; but simply, that, if the wares they induce us to buy be more than we want, or the material not the best for our purpose to buy, but that which is most profitable for them to sell, we consider they are but making a fair use of their opportunity, and fall back on the proverb, *Caveat emptor*,—the buyer must look out for himself.

Now, there is no denying that the business of the Apothecary is a trade to which so large an amount of professional knowledge has been superadded, and which has been carried on of late in so honourable and high-minded a spirit, that the trading element is becoming extinct; therefore, its members deserve whatever *prestige* is derivable from a designation strictly professional, and from a renunciation of the old title, with its trade associations. The Court of Examiners of the Apothecaries' Society has, by its admirable Regulations, abolished its own vocation. Instead of Apothecaries it has made Physicians. The conversion of Trade into Profession is now nearly completed in fact, and we want it stamped and made law.

Thirty years ago, or less, we know that the remuneration of General Practitioners was dependent on the supply of medicines; and that charges for visits were only made when the patient resided out of town. Then (since men must live) the true ingenuity of a tradesman was shown in the shaping the quantity and form of the medicines in such a way as to produce the largest returns. The pauper received his saline febrifuge in a powder, wrapped in paper; the tradesman in a six ounce "mixture," coloured with various substances to give some variety, and gratify, at least, one of the senses; while the squire received the same in four separate "draughts," accompanied probably by four powders to create effervescence. But the secret (if we may call that secret which was thoroughly known) was that twopence, three shillings and sixpence, and seven shillings and sixpence respectively were the sums equitably enough due for the services rendered in the several cases, and which had to be obtained by this circuitous and miserable method. What humiliating results sometimes followed!—how items in the bill were disputed, and the unfortunate Apothecary was informed that "no medicine was wanted to-day," or, sometimes, regaled with the sight of a dozen or more of unopened bottles,—are matters too notorious to be dwelt upon. He was expected to give his time and skill for nothing, and was grumbled at for sending in as much physic as he could drench people with.

Charges for visits, so many per guinea, are now rapidly taking the place of the old system; and the patient provides himself with medicines from a prescription, or if, in country places, this be inconvenient, the Practitioner agrees, without extra charge, to supply what is wanted; and in this case supplies, doubtless, exactly what he himself would take if he were the patient, and no more. In supplying medicines in this way, as we said in our Number for November 10, there is nothing of which any gentleman need be ashamed.

If, then, men no longer act as tradesmen, let them not have the name.

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There is another reason of vital importance why the name of Apothecary, and the Act of 1815, should be abolished; and that is the Apprenticeship system; a mode of initiation not good for all trades, but absolutely injurious to a profession. A youth is removed from school just at the age when his previous education is beginning to tell: just when he is ripe enough to receive the greatest benefit from an advanced Classical education, and still more from instruction in Mathematics and Natural Philosophy. He is placed with a Practitioner,—an awkward inmate in the family, and an inefficient assistant in the business,—where in the pride of incipient manhood, he drops his earlier studies only to learn the daily routine of carrying on a business whose principles he is not qualified to understand. Then, it may be, after one (formerly it was after three, four, or five) of the best years of life, he is removed to a Medical School, where his unexercised mental powers are taxed by a sudden introduction to studies embracing one-half the range of human knowledge; some of them most abstruse in their principles, others bewildering in the multiplicity of their details. The Student has forgotten his Latin, and *grinds* for the Celsus examination at the Hall; he has forgotten his elements of Natural Philosophy, and scarcely endeavours to follow his chemical lecturer through his account of light and electricity; he has lost the habit of study; and is happy in being able to resort to a private tutor for his examination.

It is perfectly true that the apprenticeship of five years, required by the Apothecaries' Act of 1815, is now little more than an empty form; the parchment is signed and sealed, a fee is paid, but there is no *service*. Nay, the Court of Examiners of the Hall, or their legal advisers, if we are not misinformed, have exercised their beneficent ingenuity in such a way that the relation of the apprentice to his master is of the most shadowy kind. For example: a youth after a short residence, or none at all, goes, *with his master's consent*, to study in London; at the end of five years he obtains a certificate that he has acted faithfully and well as an apprentice; the faithfulness consisting in the fact that he has followed, with his master's consent, the same course that he would have followed if he had not had a master. In fact, the defence of the apprenticeship system as it exists now, is, that it is a sham: let it, then, go the way of all shams. If anyone wants to know what it was sixty years ago, let him read Chamberlaine's *Tyrocinium Medicum*, a book treating of the duties of Apothecaries' apprentices in those days,—duties now almost too menial for the grocer.

Surely it requires no demonstration that after the ordinary school, a course of study of languages, mathematics, and philosophy, followed by Medical lectures and Hospital Practice, will render the Medical aspirant in every respect better qualified for the duties of his life than a year or two spent in dispensing would do; and that when his studies are over he may with mutual advantage pass one or more years as an assistant to a Practitioner, to learn the daily routine of Professional life, and gradually accustom himself to the whole responsibilities of practice. Some young men will gladly pay a premium for the privilege of being admitted into the house of some energetic man in large practice; others may gladly accept a stipend, or their board, for their services in parish and club practice; in either case a mature student will be a more useful and creditable inmate than a lad raw from school.

Let, then, the name and *status* of Apothecary and Apprentice pass away, as the substance has. But we again repeat, that a change such as this can only be made decently, if due respect be paid to the existing law, and the rights created under it.

The existing Practitioners, in becoming Apothecaries, have passed an examination which renders them well worthy of a better designation, and have obeyed the law. It is extremely unfair, therefore, to subject them to the sudden competition of young men, graced by a better title, but one obtained at no greater cost of time and education than their own. Equally unfair is it to extend that modern system of selling diplomas, which has the worst possible odour of trade about it, and which is fast exciting the derision of the public. If the whole mass of English General Practitioners is henceforth to be affiliated to the London College of Physicians, let it be done on a strictly legal and broad basis, and without the exaction of heavy fees from those who are now practising legally, and wish to avail themselves of the improved *status*.

And what is to be the future of the Society of Apothecaries? their career will have an inglorious ending if they subside into a mere trading body, useful as they are in these days of adulteration in maintaining the standard of purity of their drugs, and in maintaining the principle that to get a good thing you must pay a fair price. But surely, with so many active men in their Society, it will be a shame if they do not make for themselves some special scientific work; such as improvements in the form and composition of old remedies, or the research for new ones. The scientific barrenness of the Apothecaries as a Corporation is the greatest reproach to them, and it is that which leaves them now without one hearty partisan to avert the threatened downfall of their privileges.

THE WEEK.

The Board of the Queen's Hospital, Birmingham, are to meet on the 18th instant, to consider the appointment of an Ophthalmic Surgeon and a Dental Surgeon to that Hospital. This has arisen from the Report of the Committee, read at the annual meeting of Governors held last week. In this Report it was stated,—

"That in order to render the Hospital still more beneficial to the community in general, the Committee propose shortly to open a ward for children; and amongst other additions it is intended to introduce, in accordance with the recommendation of the Royal College of Surgeons, 'vaccine inoculation.' The Medical officers have recommended the appointment of a Dental Surgeon; and the Committee think the appointment of an Ophthalmic Surgeon worthy of consideration. The Committee called attention to the address issued by many of the leading Physicians and Surgeons, in which it is stated 'that much detriment to the public and to the Medical Profession arises from the practice of opening small institutions under the name of Hospitals, for particular forms of disease, in the treatment of which no other management, appliance, or attention is required than is already applied in the existing General Hospitals;' and added: 'It is worthy of consideration how far it may be desirable to appoint an Ophthalmic Surgeon.' The Reverend Chairman said, 'He thought when the general prosperity of Birmingham—by reason of the variety of its manufactures—was taken into consideration, the fact that its Hospitals were insufficient for the accommodation of the afflicted poor was anything but creditable to the town. He then adverted to the address of the London Practitioners, and while giving it a general support, thought it should be taken with discrimination, and in a somewhat restricted sense.'"

Sir Benjamin Brodie's "restricted sense" exempts Ophthalmic Hospitals from the general censure on Special Hospitals. Sir Charles Locock, with far more reason, exempts Hospitals for Women and Children. Every other Specialist of course excludes his own peculiar specialty; and the end of the movement will probably be to endeavour to take the happy medium between two extremes, to institute special wards in General Hospitals, and enlarge the Medical staff of these Hospitals sufficiently to ensure efficient attention to both in- and out-patients. This is certainly the proper course to take everywhere except in very large cities, and it is quite certain that no "management, appliance, or attention," can be

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provided in an Ophthalmic Hospital which ought not to be provided in special wards of those of our General Hospitals who are not restricted by want of funds. Beyond a dark curtain to the windows, we cannot see what special management, appliance, or attention can possibly be wanted; and there are none of the operations on the eye which any well-educated Surgeon, with a fair amount of practice, ought not to be able to perform with credit to himself and advantage to his patient.

A year and a-half ago the Indian Government, desirous of procuring cinchona plants for transportation to India, in order that England might derive her supplies of that invaluable febrifuge from the East, despatched an agent to Peru, for the purpose of collecting and bringing over the plants. The agent selected was Mr. Clements R. Markham, a well-known traveller, who had accompanied one of the Polar Expeditions, had travelled in Peru, and had made himself personally familiar with the district in which the cinchonas flourish. He is besides Hon. Sec. of the Hakluyt Society for the Publication of old Narratives of Voyages and Travels. After many adventures, Mr. Markham succeeded in bringing to England a large number of healthy plants, and was immediately despatched with them by the overland route to India. But the result was not altogether propitious. Many of the best plants were washed overboard and perished in the Red Sea; and we find, by extracts from the Indian papers, that those which reached the Neilgherries are all dead. Nevertheless, we learn from private sources, that a large number of healthy cuttings are thriving in the Government Garden at Calcutta, and that a large stock of seed has arrived in good condition; so that there is hope that this most important experiment may succeed in time.

There is some ambiguity about the new Regulations of the College of Physicians, so far as regards the fee to be paid by Licentiates of the proposed new order. But it appears that those fees will amount to thirty guineas, inasmuch as every candidate must pay a fee of five guineas before he is admitted to the first part of the Professional Examination, and a further sum of ten guineas before he is admitted to the second part. Moreover, there is a fee of two guineas to be paid for admission to a Preliminary Examination in languages, mathematics, and natural philosophy—but this clearly applies to students only. "The fee *for the Licence to Practise* Physic, as a Licentiate, shall be fifteen guineas, exclusive of stamp duty." Hence, the sum of the fees required from persons who begin from the beginning is thirty-two guineas. But it is stated that—

"Any 'registered Medical Practitioner' whose qualification or qualifications shall have been obtained before the 1st day of January, 1861, having been, with the consent of the College, admitted a Candidate for the Licence, will be examined in the Principles and Practice of Medicine and Midwifery; but he will be exempted from such other parts of the Examinations hereinbefore described as his qualifications may seem to the Examiners to justify."

We believe we are correct in stating that no fees are exacted for the change of Licentiates into Members. But whether future Licentiates, who undergo the Medical and Midwifery Examination only, will be charged five, ten, or fifteen guineas for that Examination, exclusive of the fee for the Licence and the stamps, does not appear.

Mr. Higford Burr, in the course of some interesting correspondence in the *Times* relating to pisciculture, and the increased supply of fresh-water fish says that "Curious crosses may be artificially obtained. A German gentleman with whom I am acquainted, Mr. Fritz Heinzelmann, of Kaufbeuren, Bavaria, in 1855 impregnated the ova of greyling with the milt of pike, from which fish were hatched."

A patient in St. Mary's Hospital committed suicide by cutting his throat on the afternoon of January 2. The evidence given at the inquest showed that he had been in a desponding state for some time, and the verdict affirmed that his mind was unsound. It is not fair, then, that this case should be headed, "Alleged Ill-treatment by Nurses," as we find it in the penny papers.

The "Ladies' Sanitary Association" are organising a kind of Medical Mission to the poor. Familiar Lectures on Health are to be delivered in various poor districts, and we see lectures announced on Healthy Homes, on Dress in Relation to Health, on Catching Cold, and on Infant Feeding, by Drs. Rogers, Sieveking, and other gentlemen.

A subscription has been commenced for the purpose of raising in Dublin a statue of Sir Henry Marsh. A similar attempt to do honour to Sir Philip Crampton having failed, it is now proposed to unite the two funds and found an Hospital for Convalescents. With such an object in view, the public might be expected to assist the Profession, though it seems that this city of 300,000 inhabitants only subscribes £1400 a-year, or three farthings in the pound on the valuation, towards Hospital relief in the form of what some of the ratepayers describe as "excessive taxation." We trust that this scheme may meet with general support, for, as a lively writer in *Saunders' News-Letter* says,—

"In these Hospitals of Dublin, nobly endowed, admirably managed, healthfully situated (as many of them are), there languishes at this moment many a patient labouring under the effects of accident or disease, passing sleepless nights and anxious days, tossing in the heat or bathed in the perspiration of hectic—consuming bark, and porter, and mutton chops, attended with the greatest care and prescribed for with the most consummate skill, who do not get well, because they want that luxury of the rich citizen, change of air—fresh country air, laden with the soothing perfume of spring flowers, or rendered bracing by the salt and iodine of the exhilarating sea breeze. To keep such patients in Hospital is death to some of them, and for all, a great expense to the institution. To send them home to their cellars or garrets, in the lanes and alleys of our city, to Blackpitts or the Coombe, is but to hasten their doom and impoverish still more the scant resources of the wan widow and the wailing children."

REVIEWS.

Du Rôle de l'Alcool et des Anesthésiques dans l'Organisme; Recherches expérimentales. Par LUDGER LALLEMAND et MAURICE PERRIN, Médecins-Majors, Professeurs aggrégés à l'Ecole Impériale de Médecine et de Pharmacie Militaires, et J. L. P. DUROY, Membre de la Société de Pharmacie de Paris. Avec dix Figures intercalées dans le Texte. Pp. 432. Paris: 1860.

THE scientific world has its revolutions, like the political. For some years physiological chemistry reposed under the venerable sceptres of Berzelius and Prout. Then came Liebig, whose brilliant generalisation seized on men's minds like a charm, and placed him at once on the Imperial throne; he holds it, too, and there is no fear that his dynasty will pass away like that of Naples. But it must be confessed that the work of which we give the title above threatens to rob his domains of an entire province; or, "to let similes drop," it professes to show that a certain portion of the details of his chemical theory of food, are not only not true, but are contrary to the truth.

The leading doctrines of Liebig have been reiterated so often,

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not merely in Medical but in popular lectures and books, that we need scarcely recall to the reader's recollection his grand division of aliment into the Respiratory, or fuel food, and the Plastic, or tissue food; nor yet to the fact that the former class comprises starch, sugar, fat, and alcohol. "Alcohol," says Liebig, "stands high as a respiratory material. Its use enables us to dispense with the starch and sugar of our food, and is irreconcileable with that of fat."

The grand array of facts and theories marshalled by Liebig, his demonstration of the true food of plants, of the relation between food and work, and of the material basis of physiology and pathology, in contradistinction to the older mystical notions of vital processes, stand untouched; but we are compelled to admit now that alcohol is seriously threatened with loss of its right to the title of respiratory food, and that the authors of the work before us give fair presumptive evidence that alcohol is not one of those alimentary substances which undergo oxidation; but that, after remaining in the blood a certain time, it is eliminated by the lungs, skin, and kidneys, totally and entirely as alcohol, with the exception of a very small quantity acidified in the stomach.

The work contains an account of experiments showing the part which alcohol and anæsthetics play in the animal economy. It began some years since with experiments instituted by M. Ludger Lallemand on the action of chloroform, and it embraces an account, not merely of alcohol, ether, chloroform, and amylene, substances which are very closely analogous in their mode of action, but likewise of carbonic acid and carbonic oxyde, which, though anæsthetics in some sense, inasmuch as they stupefy, yet differ altogether from the former class of true anæsthetics.

From its importance in Medicine, politics and morals, alcohol claims the first place. After a singularly lucid and copious historical introduction, in which the authors tell us all that was already known of its nature and effects, with references which form a pretty complete bibliography of the subject, they give us a chapter of "*notions chimiques sur l'alcool*," ($C^4H^6O^2$,) in which its relations to analogous bodies and to the products of its own oxidation, as aldehyde ($C^4H^4O^2$) and acetic acid ($C^4H^4O^4$), are shown: as these form essential points in their argument. They next describe the symptoms of alcoholic intoxication, with minute details of the condition of every organ and function; one thing worthy of remark here being the assertion that the absorption of alcohol causes a separation of fatty matter from the blood in minute brilliant particles. Then they give details of experiments for showing the presence of alcohol in the solids and liquids of fthe body,—First, by distillation, by which it was separated rom blood, brain, breath, and urine. Secondly, by a volumetric method. It was ascertained that the vapour of blood or brain, minus alcohol, does not reduce a solution of chromic acid to the green oxide. The vapour of alcohol does. The vapour of the blood, liver, and brain of animals poisoned with alcohol does. Therefore, the blood, liver, and brain of animals so poisoned do contain alcohol.

In the next part, the authors prove that alcohol is not oxidised in the system. If it be oxidised, it may be converted into aldehyde (= *al-de-hyde, i.e., al*cohol *de-hyd*rogenised), or acetic, or oxalic acid. Aldehyde is recognised by its odour, and by its greediness for oxygen, through which it reduces the nitrate of silver to a brilliant metallic film. But neither of these substances is detected in the blood. To clinch this part of the evidence, a counter-series of experiments was made with aldehyde. This substance, after administration, was detected in the blood and breath; and so was the acetic acid, formed by its oxidation; but neither aldehyde nor acetic acid is found after giving alcohol; therefore alcohol is not oxidised into those substances. But it may be said that the alcohol is oxidised immediately into carbonic acid and water. If so, say our authors, what becomes of the carbonic acid? The quantity eliminated by the lungs is diminished after alcoholic drinks have been swallowed (a). The blood, too, retains its arterial colour. We can prove that alcohol, as such, exists in the blood; and that no transformation takes place *viâ* aldehyde. Then let they who believe in a conversion into carbonic acid prove it. Besides, the authors prove that alcohol is eliminated in notable quantity by skin, lungs, and kidneys. They show, also, the time during which it remains in the economy. A man, who had taken no alcoholic liquor the preceding day, drank at 10.30 a.m. with his breakfast a litre of red wine. His breath and urine were tested from hour to hour. The former ceased to decolorise the solution of chromate of potass by six o'clock; the latter by ten. Other experiments show that alcohol may be detected in the blood after sixteen hours.

There is but one objection which can be raised to the conclusions drawn from these researchee, and that is, that they are qualitative merely. "Do our experiments," say the authors, "warrant us in concluding that alcohol is neither transformed nor destroyed in the organism, and that it is eliminated *totally?* We believe we may say Yes. We cannot, we confess, reproduce ALL the alcohol administered *in its exact weight*, but we do not think it fair to demand such a demonstration." We have read, and read again, our authors' statements and experiments on this part of the subject, because we feel, as they do, that it is the weak part. Granting that alcohol is eliminated by the skin, lungs, and kidneys, we yet cannot help confessing that the quantity demonstrated is very small. For example—Four men drank at dinner three bottles of Burgundy, containing ten to twelve per cent. of alcohol, and about 120 grammes of cognac. All the urine passed by them during the four hours succeeding the repast, distilled and redistilled, yielded two grammes of liquid smelling of spirit, and capable of burning. We do not learn the quantity of alcohol contained in their urine—in fact, it was a mere trace.

Four men drank, each, 100 grammes of *eau de vie*. During four hours they passed their breath, by turns, through an apparatus, in which it flowed through nine metres of tube, and through ten receiving vessels filled with iced water. A trace of alcohol escaped condensation, as was shown by a chemical test-tube at the extremity of the apparatus. After four hours, the contents of the flasks, which represent, of course, the pulmonary exhalation of one man during that time (for the four breathed by turns) were collected, and distilled and redistilled from quick lime. The result was four grammes *de produit définitif*; but this definitive product smelled very feebly of alcohol, and would not burn. It was the merest trace.

The more, in fact, we examine the details, the more open do they seem to this objection, that there is no demonstration of quantity. The volumetric estimation was not used to give absolute, but only comparative results. We have a test liquor formed by dissolving a decigramme of bichromate in thirty grammes of sulphuric acid; a given quantity of this test liquid is employed in a tube, and we learn that so many tubes were decolorised in such a time; but we do not learn the exact quantity of alcohol required to decolorise the tube.

We cannot follow our authors into their account of the dietetic use and abuse of spirituous and fermented liquors, which are temperate and sensible, and not contaminated with teetotal fanaticism. We must pass on to chloroform, the phenomenon afforded by inhalation of which *in dogs* is detailed minutely, and we will just note the points of greatest interest.

The authors find that great differences exist between dogs of equal size, in the quantity of chloroform and time of inhalation requisite to cause death. Alcohol, chloroform, ether, and amylene have a primary and special effect on the brain and spinal cord; they accumulate there; they abolish the sensibility of these parts to mechanical irritation, though not to electricity. The carbonic acid and oxyde, on the contrary, stupefy by direct alteration of the blood; and the nervous centres retain some sensibility to mechanical irritation as long as life lasts. This is a marked and important distinction. Our authors reject sideration and paralysis of the heart as causes of death in animals under chloroform, and state that life may always be saved if artificial respiration be begun even after the heart has ceased to beat. There is no true *asphyxia*, or disturbance of blood change, as there is after inhalation of the two carbonic gases; but cessation of breathing, merely because of the narcotism of the medulla oblongata. Artificial respiration saves life by stimulating the pulmonary mucous membrane, by setting the heart in motion through reflex influence, and by allowing the blood charged with chloroform to part with some of it to the fresh gaseous current introduced. But so as the respiratory movements be set going somehow, it does not matter at all with what gas the lungs are filled for the first few inspirations. Nitrogen or hydrogen is as good as atmospheric air, *and oxygen inhalations are worthless;* the great

(a) E. Smith says it is increased by some alcoholic liquors, decreased by others; so that, at all events, alcohol *per se* will not increase the pulmonary CO^2.

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point is to excite the act of breathing with sufficient energy, so as to stir the heart and devaporise the blood.

Here we must conclude. The logical structure of the work deserves commendation, since every point follows in the due order so coveted by hasty readers and weary reviewers. We think that our authors have at least established their point thus far; that they have thoroughly disturbed a settled article of faith; that the analogy of alcohol with chloroform renders it probable that alcohol is eliminated if chloroform be; and that whoever maintains that alcohol *is* oxidised, must take the burden of positive proof on himself.

The Modern Treatment of Syphilitic Diseases, both Primary and Secondary. By Langston Parker, F.R.C.S. Fourth Edition, entirely re-written; with numerous Additions. 8vo. Pp. 403. London: 1860.

The name of Mr. Langston Parker is deservedly associated with the study and treatment of syphilitic diseases, as the fact of his well-known work having reached a fourth edition amply testifies.

Although Mr. Parker's main object is to recommend a peculiar mode of treatng syphilitic diseases—viz. by the administration of the mercurial vapour-bath,—he has entered very fully into the consideration of the pathology and treatment of venereal diseases in general, and in the present edition there is a great deal of new matter, and there are certain questions discussed to which we shall call attention. We may premise that the work is admirably written, and that in every page there is to be found valuable information.

In the Chapters on the Primary Sores, the author points out with clearness the distinctions between the simple and infecting chancre, and the indications which call for the employment of mercury, which remedy he, in common with most practical Surgeons, uses in some forms of the disease:—

"There are several circumstances which particularly indicate the use of mercury in primary syphilis. 1. When a soft chancre which has resisted other modes of treatment remains long open, and shows no disposition to heal under the non-mercurial plan. 2. When secondary symptoms appear before the primary disease is cured. 3. In well-marked indurated chancre, with a chain of indolent, indurated glands in one or both groins, without any tendency to suppuration. 4. In certain cases of rapidly-spreading ulceration hereafter to be described."—P. 15.

In the Chapter on Balanitis, the interesting question as to whether this condition is ever really of a true syphilitic nature, and liable to be followed by secondary symptoms is considered at some length. Mr. Parker is of opinion that balanitis does occasionally produce well-marked secondary symptoms, and he has detailed some cases which pretty clearly prove his position; and we have lately had in our own practice a well-marked instance of this disease being followed by decided syphilitic ulcerations of the tongue and fauces.

With respect to the interesting question of the specific suppuration of a bubo preventing the occurrence of secondary symptoms, Mr. Parker, although agreeing, as all observers must to a certain extent, with Ricord on this matter, does not go so far as that Surgeon:—

"M. Ricord has laid down a positive law that a bubo which suppurates specifically—that is to say, which furnishes an inoculable pus,—is never followed by secondary symptoms. All I can say is that buboes which suppurate freely, and to all appearances specifically, are followed in some cases by secondary symptoms.—P. 165.

"On the other hand, I could detail numbers of cases where buboes which have suppurated specifically, and assumed a more formidable local condition, have not been succeeded by the least constitutional taint. The law appears to be, that the suppurating bubo is not followed by secondary symptoms; but to this law there are occasional exceptions."

The chapters on various manifestations of constitutional syphilis are replete with valuable information and sound practical sense: as an illustration of this, we will refer the reader to the short yet comprehensive chapter on one of the sequelæ of syphilis, which is often a subject of embarrassment to the Surgeon, viz.—syphilitic testicle. The pathology of this disease, its late manifestation, and the occasional difficulty of its diagnosis are clearly described by Mr. Parker, and the proper treatment which should be adopted is laid down simply and briefly. In two pithy remarks, the whole sum of the treatment for this disorder is contained:—

"The patient should at once be placed upon a mild mercurial course suited to his age and constitution. He should take calomel and opium at night, or blue pill and opium; with iodide of potass in the day with bark or sarsaparilla. . . . . Alone, the iodide of potassium will frequently disappoint us, and will not cure the disease."—P. 278.

The mode of employing the mercurial vapour-bath is described at length in this work, and a large number of cases illustrating its beneficial use in all varieties of syphilis are narrated.

We shall not make any further remarks, as we have already devoted more space than usual to a new edition, but we cannot conclude without strongly recommending this very useful and practical book to all who take an interest in the study and treatment of the diseases treated of.

On the Reparative Process in Human Tendons after Subcutaneous Division for the Cure of Deformities. By William Adams, F.R.C.S., Surgeon to the Royal Orthopædic and Great Northern Hospitals. 8vo. Pp. 174. London: 1860.

In no department of Surgery, perhaps, have there been such advances made as in that which includes the cure of deformities of the extremities by the division of the tendons of the diseased part. The treatment of these cases has been brought almost to a state of perfection, and this is in a great measure owing to the attention which has been particularly devoted to the subject by the highly-educated Surgeons whose names are connected with Orthopædic Surgery. A great outcry is just now being made in certain quarters against special institutions for the treatment of disease, but the most extreme opponents of Special Hospitals cannot deny that the opportunity for the study and treatment of a large number of cases of deformity in an Hospital devoted to these alone has been attended by the best results—results indeed, which could not have been obtained so effectually in any General Hospital.

The work before us is evidence of this fact, for it is written by a gentleman who, in one sense a specialist, is nevertheless well known as a highly-educated Surgeon, but who has devoted himself more particularly to the study of deformities of the human body. Mr. Adams has here furnished us in a concise yet clear manner with an account of those processes which take place after the subcutaneous division of tendons; his observations are the result of careful personal investigation, and we are furnished with the proof that this is really the case, and that he is not merely giving us the views of others. He has had the opportunity of examining the parts in the human body in fifteen instances where subcutaneous section had been performed at a period varying from four days to three years previously. Moreover, he has made experiments on sixteen rabbits, and the results are recorded in the work.

Mr. Adams has found that the true reparative process in the human subject commences in an increased vascularity of all the structures at the site of the subcutaneous section, especially in the loose, investing sheath of the tendon. Next there takes place in the meshes of this sheath, a blastematous effusion, which gradually extends and increases in quantity, and is found, on microscopic examination, to contain numerous nucleated cells. Then takes place the formation of capillary blood-vessels, the nuclei become elongated, and are seen after the addition of acetic acid, to be arranged in parallel linear series.

"As a gradual change towards perfecting the new connective tissue in its structural characters and general resemblance to the old tendon, the divided extremities of which it serves to connect, a fibrillated appearance of the new tissue is traceable under the microscope, and, in the course of time, a more distinctly fibrous appearance, *i.e.*, tissue capable of splitting into distinct fibres under the microscope, becomes developed. The fibrous tissue, however, always remains more delicate and less distinctly separable than in old tendon."—P. 64.

With regard to the nature of the tissue as a connecting bond between the extremities of a divided tendon, the author makes the following statement:—

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"So far as I have been able to form an opinion from the observations on the human subject, and experiments on animals now recorded, I believe that the newly-formed connective tissue, or new tendon, remains during life as a permanent tissue, and as an integral portion of the tendon, the divided extremities of which it has been formed to re-unite."—P. 67.

After showing the nature of the reparative processes, Mr. Adams considers the circumstances which interfere with them. And these observations are of great practical moment, for he points out that injudicious after-treatment, from too early and too rapid mechanical extension, or from too great reliance upon the unaided powers of Nature, seriously prevents the perfection of those processes which are the natural result of well-conducted treatment.

Mr. Adams thinks the integrity of the loose tubular sheath surrounding the tendon, as, for instance, the tendo-Achillis, to be of great importance. He believes, that in subcutaneous section, this sheath is not divided but yields before the knife. He, moreover, states, "When tendons, situated in dense fibrous sheaths of a tubular form, are divided, there is great danger of complete non-union, the divided extremities of the tendon becoming adherent to the inner surface of the sheath without any direct connexion with each other. This I have shown to occur in the posterior tibial tendon, when divided immediately behind the inner malleolus. The practical rule, therefore, is never to divide a tendon as it passes through the denser portions of its sheath; and when the operation is performed near to such portions of the sheath, the extension must be conducted very slowly."—P. 81.

It is impossible to speak too highly of this valuable work. The descriptions of the author's investigations and dissections are clear and evidently faithful; the conclusions he arrives at are, we believe, in the main, sound and reasonable. The practical deductions set forth will be found of the greatest use to those who take interest in this department of Surgery, and as a scientific work, we cordially recommend it to the attention of all.

An Epitome of Surgery. By J. Bradnell Gill, M.D. London: 1860.

The author says in his preface, "If I have macadamised the road to the theory of Surgery, I have accomplished my utmost wishes." We believe that the process of macadamisation is effected by breaking up materials into the smallest pieces; accordingly Dr. Gill has broken up his subject into fragments, and presents us with them for a shilling. When we say that lithotrity is disposed of in two lines, and lithotomy in ten, we have given an idea of the scale of the work. The style is that of Mr. Alfred Jingle in Pickwick. The treatment of "Fractured Base of Skull" may be a specimen:—

"Prop up in bed; shave head; cold lotions; warmth to extremities; invariably die."

This is the treatment of neuroma:—

"Endeavour to cause absorption; if that won't do, excise tumour without dividing nerve."

For "Red-gravel" the Practitioner is bid to "abstain from greasy dishes and high living. Give potassa and opium internally."

We seldom have seen a book more incorrectly got up, and abounding in more gross misspellings. If the author intended it as a joke, it is a very dull one, and has involved a sad waste of time; and we should think that a man inclined to indulge in authorship might have found some subject more worthy of him.

On the Successful Treatment of Gonorrhœa and Gleet, without Copaiba. By Thomas Weeden Cooke, Surgeon to the Royal Free Hospital. Pp. 32. London: 1861.

Mr. Cooke describes the common treatment of gonorrhœa as offensive and tedious. He finds that 118,296 lbs. of copaiba were imported into the port of London during the first ten months of 1859, and calculates that this quantity would serve for nearly half-a-million of persons, supposing they were to take it during three weeks each at the rate of half-a-drachm per diem. He thinks that "these commercial statistics reveal strange facts in connexion with our moral and social relations." To diminish the suffering occasioned by the disease, and the disgusting remedies in vogue, he proposes first alkalies, used till the ardor urinæ has abated; afterwards injections of chloride of zinc, in the proportion of from half-a-grain to two grains to the ounce.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

ON PULMONARY OSMOSIS, OR RESEARCHES ON THE ABSORPTION AND EXHALATION OF THE RESPIRATORY ORGANS.

By LOUIS MANDL.

In the author's researches on the intimate structure of tubercles (published in the *Archives* for 1855), he arrived at the conclusion that these morbid productions are devoid of all organisation, consisting solely of a solid, amorphous substance, the result of a coagulation of matter first dissolved in the blood and then exsuded. He compared this amorphous element with analogous products of various diseases, and demonstrated that pathological histology does not furnish sufficiently distinctive characteristics.

Continuing these researches, and examining into the causes which give rise to the tubercular exsudation, the author has arrived at the conclusion that it is sometimes due to a general cause,—a diathesis,—and at others to a purely local or accidental cause. In the course of the investigation he was struck with the frequency of the coincidence of tuberculisation and diabetes; and he sought to ascertain the influence of glucose spread throughout the organism and penetrating every tissue upon the production of tubercle. This has led to the performance of the series of experiments, an account of which it is the object of this paper to give. The experiments consisted in placing certain aquatic animals in saccharine solutions. The following is a *resumé* of the results:—

1. The life of animals breathing in water is incompatible with the presence of a more or less considerable quantity of saccharine matter, whether this consist of the various kinds of sugar or non-fermentable sweet principles, such as glycerine or mannite. 2. Infusoria, pulmonated mollusks, annelides, crustacea, batrachians, aquatic insects, and fish, all perish in a period more or less short, according to the kind of sugar, the strength of the solution, and the species of the animal. Thus, fish from twelve to fifteen centimètres in length, die in forty minutes in a solution containing a tenth part of glycerine, and live four or five hours in a solution of sugar of the same strength. 3. Numerous experiments have proved that death cannot be attributed to poisoning, to chemical action on the blood, to fermentation, to absence of air, or to viscosity—it being solely due to the *osmosis* (endosmosis and exosmosis) induced by the saccharine solution. 4. This action is excited through the permeable membranes, and especially through those of the respiratory organs; the non-fermentable sweet principles possessing superior osmotic power to that of the true sugars, which explains the celerity of their action. Infusoria comport themselves as vesicles, the osmosis operating through the whole of their delicate envelope; and they are seen first to collapse (exosmosis) and then to distend (endosmosis), even sometimes to bursting. In animals of higher development, in which the thickness of the integument confines the osmosis chiefly to the branchiæ, the blood is observed to become thickened in these, and the circulation arrested in them, in consequence of the exosmosis of the liquid portions. The circulation in the lungs of a frog may be instantly arrested over a limited space by the application of a drop of glycerine, and in a few minutes by a drop of syrup. Experiments made on the fœtus of the salmon, and on the circulation of plants have furnished similar results. 5. Many hundred experiments were tried with the endosmometer, having various substances (the pericardium of the sheep being the most suitable) for its diaphragm, and it resulted that the water of the blood, charged with the salts of the serum, first passed into the saccharine solution, next the albumen, and then the colouring matter. The passage of all these elements took place in a short time, when only a small portion of the osmogenous substance lay on the diaphragm; but the passage of the

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albuminoid elements becomes slow in proportion as the quantity of the saccharine fluid is considerable, so that for a long time the water containing the salts is then all that passes through. 6. Development is also impeded by saccharine solutions, as is shown by experiments made with muscular tissue macerated in them, and by those instituted on the fertilised ova of fish. 7. The following physiological and pathological circumstances are elucidated by the foregoing investigation:—(*a*) Infusoria, the excessively thin envelope of which is very sensible of osmotic action, can neither live nor become developed in fruits impregnated with sugar, as plums or grapes; but insects with their thicker integument may become developed in apples, plums, etc. Doubtless it is by the thickness of its envelope that the cysticercus is protected from the osmotic action of the glucose in the liver. (*b*) The antiseptic and preservative power of sugar known for so long a period may be explained by its power of arresting the development of organised beings. (*c*) The thirst induced by the ingestion of sugar is due to the exosmosis of the serosity of the blood. (*d*) The abundance of glucose in diabetes explains the characteristic thirst in this disease, and the impossibility of any serous effusion. (*e*) The coincidence of gangrene with diabetes has been frequently observed, and may not the arrest of circulation leading to gangrene be attributed to the existence of glucose in the vicinity of the capillaries? (*f*) The absence of venereal desires and of procreative power observed in the diabetic may be due to the presence of glucose in the semen—this substance in the experiments causing the immediate death of spermatozoa. (*g*) Small quantities of sugar induce an exosmosis of the gastric juice, and thus powerfully aid digestion in some persons; while large quantities introduced into the blood increase the osmotic power of the fluid; and this explains the utility said to have been derived from the exhibition of sugar in dropsies. (*h*) The advantageous employment of glycerine as a dressing in gangrene, hospital gangrene, etc., is explained by the impossibility of the development of organisms in pure glycerine. Purulent and other serosities are resorbed by the glycerine; and the utility of the application of this substance to dry surfaces arises from the osmosis establishing a greater humidity. (*i*) Various experiments have been undertaken in reference to the local production of tubercle by the injection of osmogenous substances, and especially saccharine substances, into the pulmonary vesicles. The results, which, when more multiplied, will be published, give good reason for the belief in the production of localised tubercles in the lung by the exsudation (exosmosis) of plastic matters, independently of diathesis. These experiments bring the subject back to its original starting-point,—the accidental production of tubercles in diabetes, in which affection all the tissues are impregnated with glucose. These inquiries open a new field to therapeutics, in explaining the (in the author's belief) frequent spontaneous or artificial cure of tubercles of the lung, when these are independent of diathesis.—*Archives Generales*, tome xvi. pp. 49—64 et 161—187.

THE ORIGIN OF OVARIOTOMY.

By Dr. GROSS.

In this paper, Dr. Gross gives an interesting account of the life and Surgical services of Dr. Ephraim McDowell, of Kentucky, who he shows was undoubtedly the first performer of the operation of ovariotomy, an operation he repeated in at least 12 other cases. This first operation was performed on a Mrs. Crawford, of Kentucky, in 1809. The sac removed weighed 7½ lbs., and contained 15 lbs. of a turbid, gelatinous-looking substance. In 25 days she was entirely recovered, and returned to her home. When the account of this case was published, it was received with great incredulity, and by none with greater than by Dr. James Johnson, in the *Medical Chirurgical Review*. Still, the patient did not die until 1841, continuing to enjoy excellent health until her 79th year. The second case occurred in a negress. The tumour was very large, and adhered so firmly to the bladder and uterus as to render extraction impossible. It was therefore only freely incised with a scalpel, and its thick ropy contents evacuated. The woman remained well for nearly 5 years, when the tumour again increased, and in 12 months had become as large as before the operation. The third operation was also performed on a negress, in 1816, and a scirrhous ovary weighing 6 lbs. was removed; the woman was well in two weeks, although the ligature did not come away until the fifth week. The fourth operation in 1817, consisted in removing a scirrhous ovary weighing 5 lbs. Much hæmorrhage took place during the operation, and although the woman recovered, she did did not fully regain her health. The fifth operation was performed on a negress, in 1819, and the patient was carried off by peritonitis on the third day. Of these five cases, three were thus entirely successful, one remained well for nearly five years, and one died from peritonitis. Dr. McDowell was much averse to publicity, and it was only at the instigation of friends that he published a meagre account of the first three of these cases in the seventh volume of the *Eclectic Repertory* (1817). The account met with but little attention, but a copy of the paper having been forwarded to the author's esteemed teacher of Surgery, John Bell, fell eventually into the hands of Mr. Lizars, who published it in the thirty-second volume of the *Edinburgh Medical and Surgical Journal*, when it excited at once general attention in Europe and America. The reliability of the reported cases was at once investigated and established. Accounts of the two other cases were published in the ninth volume of the *Repertory*.

Besides the above cases, which were all published by Dr. McDowell himself, Dr. Gross has obtained, by corresponding with the attending Practitioners, the particulars of three other operations performed by him. One of these was performed on a lady named Overton, aged 55, in 1822. This case is remarkable, inasmuch as it was the occasion of the greatest fee for an operation which has ever been paid in the United States, viz., 1500 dollars, being three times more than the sum stipulated for the fee. Considering the value of money in the South-west at that time, and the usually small compensation given, it may be considered equivalent to Astley Cooper's celebrated 1000 guinea fee. It was in fact only an attempted extirpation—the close adhesion of the sac to the peritoneum preventing the completion. About a gallon of bloody serum was discharged by the incision, the operator at first believing he had only penetrated the peritoneum when he had really opened the sac. The wound continued to discharge for some time, healthy pus replacing the sanious fluid, and in five weeks it had entirely healed. The patient was, however, quite cured, and lived in good health for fifteen or twenty years afterwards. The age of the next patient, operated upon in 1823, is not recorded: it was Dr. McDowell's ninth case,—the tumour filling the whole of the abdomen, and the patient being in so exhausted a state as to render it doubtful whether she could sustain the shock of the operation. The recovery after extirpation of the enormous mass was complete, and the lady contemplated marriage a twelvemonth after the operation, when ascites requiring tapping, appeared, and the case was lost sight of. The next case was that of a lady, aged 38, and the large tumour was found to be so extensively adherent that its extirpation was impracticable. She nearly sank during the operation, and died four or five months after its performance. These are all the accounts which can be attained of Dr. McDowell's operations, as he himself kept no records of them. From the testimony of his nephew and others it seems pretty certain that he had operated at least thirteen times, and that he had achieved beyond doubt eight cures, his success not being so complete latterly as at first.

Dr. Gross shows that the operations of L'Aumonier, of Rouen, and Dzondi, which have been cited as the earliest instances of ovariotomy, were not examples of the operation at all, while not only was the operation of Galenzowski, of Wilna, a different one from that of ovariotomy, but it was performed eighteen years after McDowell's first operation. We have not the space to give any account of Dr. Gross's interesting sketch of the life of this able Surgeon. He long enjoyed the first Surgical practice in Kentucky, his excellent education and industrious habits enabling him to do ample justice to the opportunities afforded him.—*North American Medico-Chirurgical Review*, November, 1860, pp. 1028—53.

PORTRAIT OF DR. WINSLOW.—Mr. M'Lean, of the Haymarket, has recently published a very fine engraving from the portrait of Dr. Winslow which was in the Exhibition of the Royal Academy. The engraving has been produced at considerable outlay, and we hope the enterprising publisher may be rewarded by the purchases of the numerous admirers of the well-known writer.

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GENERAL CORRESPONDENCE.

PROFESSIONAL STATUS.

Letter from Dr. Moriarty.

[To the Editor of the Medical Times and Gazette.]

Sir,—Having just returned home after a short absence, I have looked over the last few numbers of the *Medical Times and Gazette*, and, with your kind permission, beg to make a few observations relative to your interesting leading article of November 10.

I have frequently, for years past, had the honour of communicating my impressions, through your pages, with regard to the necessity of separating, in practice, Pharmacy from the art of Medicine, and the light in which you view that combination as affecting the social status of Professional men is not without good foundation. I am satisfied that the union of the compounding department with Medical and Surgical practice is often availed of by coxcombs and idle pretentious women as a weapon to underrate the Medical man and his wife in their position, particularly in a country where people make the classification of the human family so much a subject of preoccupation.

The supplying of drugs is not considered in a scientific sense. It is looked upon as an association with trade, which it always is not; and in corroboration of this idea, how constantly we find a Medical Practice called and described as a "business?"

But the subject under our consideration affords scope for far more elevated and useful reflection. You ask the plain question, with reference to the separation of Pharmacy from Medical Practice: "How do they manage in other European countries where no Medical Practitioner dispenses drugs?" In France, it is managed thus:—Any Medical man practising in a place removed by a certain and specified distance from a qualified chemist, has a legal right to keep and compound medicine for his own patients; and I need scarcely add, this wise and exceptional rule in no way affects his Professional status.

I think I may assert, without fear of contradiction, that isolating Pharmacy from Medical practice involves,—First, the interests of science; secondly, the interests of the community; and, thirdly, those of the Profession. Let any one take up the London Pharmacopœia, and he surely must come to the conclusion that giving practical application to its contents would require fairly the time of one conscientious man, and that he ought to possess a special education for such a purpose. An ordinary druggist is a poor substitute.

It cannot be denied that the health and security of individuals are often depending upon the intelligence of the dispenser. This belief was so strongly entertained by the people of France in 1793 that, although the sister institutions were swept away by the torrent of the Revolution, the School of Pharmacy in Paris was respected.

That the interests of the Profession, even the material interests, are engaged, I have this moment a proof before my eyes in an advertisement in your number of December 8. A Surgeon is required for Lewes Gaol and House of Correction, and the salary is announced at £160 a-year, which is to include all medicines, leeches, etc. Here we have an example of how society profits by the incorporation of Pharmacy with the other departments of Medicine, to the prejudice of the Practitioner. Were they disunited in England, as in every other European country, the Surgeon would be employed purely as such, and he would be saved the time and drudgery of acting as druggist and apothecary to a public institution into the bargain. In the latter case Pharmacy would also necessarily receive her share of protection.

Any decided change in this respect can only emanate from the Profession itself. On the Continent Pharmaciens are principally supported by prescriptions; and if, in England, the great majority of the Profession persist in making up their own, it will be vain to expect the development of a similar class of educated Pharmaceutists.

If Practitioners would simply charge for advice, and abandon the supplying of drugs, they would place in the hands of dispensers, without any loss to themselves, a large source of emolument, and by this encouragement the existing Pharmaceutical Society would soon rise into something like a National School, for the Profession would not be indifferent as to those to whom their prescriptions would be confided. The Apothecaries' Halls were originally intended to act the part so happily undertaken recently by the Pharmaceutical Society; and the creation of the latter shows the failure of the former institutions in accomplishing their obviously intended object. They were not required as Medical Schools; such was not their destination, and the sooner they become absorbed by the regularly-constituted Universities and Colleges, the better for the unity and respectability of the Profession.

I perceive that "A Poor Curate" attributes the woes of Professional men, *vis à vis* the gentry and clergy, to their wives; and this amusing circumstance brings to my recollection an historical fact in this country—namely, that at one time the Church would not allow Medical men to marry at all. It was only in the fifteenth century that the Cardinal d'Estouteville obtained a special Bull allowing Doctors to marry.

What would "A Poor Curate" think of Baron Boyer who, when he commenced his studies in Paris, supported himself by working a part of every day in a barber's shop, and who, when he rose to distinction and eminence, drove up in his carriage to the door of an humble washerwoman to ask her daughter's hand in marriage, out of gratitude for tending him in a prolonged case of typhoid fever when he was a poor and friendless lodger, thus giving a noble instance how the human heart can despise the vanities of the world? I could give the "poor curate" a litany of the names of such men, the beginning of whose career has been one continued struggle against adversity, and yet they have been, and are, looked up to by their countrymen with esteem and admiration.

I am, &c.

Stephen S. Moriarty, M.D.

Dieppe, December 22, 1860.

THE TWO SCOTTISH MEDICAL GRIEVANCES.

Letter from Dr. T. P. Beavan.

[To the Editor of the Medical Times and Gazette.]

Sir,—The Medical Practitioners of Scotland have, I am sure, read your excellent leader of the 8th inst. with much pleasure; and such of the Practitioners on this side the Tweed as have taken the trouble to inform themselves of the bearing of these questions on the general body of the Profession, will, I think, agree in the remark you make respecting the injurious tendency of submitting to the exaction of gratuitous service to the State under penalties in case of refusal.

You very truly observe that if our Profession once admit the right of the State to demand of its members any portion of their time or services, of a professional kind, without reward, other demands, of perhaps a more onerous nature, will be sure to follow. The State has no more right to require our gratuitous services than any private individual, and the difference between the demand of an official (under the Registration of Deaths Act) for a gratuitous Medical Certificate (to be sent within three days) and a similar demand to attend some hundreds of the parish poor gratuitously is only one of degree; in the former case the thin end of the wedge is inserted only, and in the latter it is driven somewhat further home.

With regard to the second grievance, viz. vaccination, can anything be more unjust or absurd?

I warn the English Surgeons holding Poor-law appointments of the bearing of this question upon their own interests. Are they aware that in Scotland the Parochial Surgeons are compelled to attend periodically at certain places and vaccinate all cases without one farthing of remuneration? In other words, when the Vaccination Act became law in Scotland the Parochial Surgeons were required to carry out its provisions without any addition to their scanty salaries!

I enclose for your perusal a report of a meeting of the Glasgow Faculty of Medicine. This Faculty, with praiseworthy perseverance, is still battling with this question, and will, I trust, receive the support of all who are interested in defending the Medical Profession from attack and insult, come from what source they may.

Your leader suggests the formation of a "Committee of Privileges," with a view to united action in cases of this

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kind; and doubtless, this is the only effective mode of defence, inasmuch as any attempt to induce the Legislature to repeal any portion of an Act of Parliament upon the demand of a small number of individuals, no matter how just their demand, will assuredly fail. It would be something like a diplomatist negotiating with the Emperor of China without an army.

This is a subject which should be taken up by the Registration Societies now forming all over England and Scotland, and it ought not to be beneath the dignity of the British Medical, and other large Associations. If these bodies will but understand that the welfare of their members may be promoted in other respects than in discussing and reading papers, they can ensure respectful attention to any reasonable requests they may, in the interests of the Profession, have occasion to advocate, but without numbers and organisation we are powerless. I am, &c.

T. P. Beavan, L.R.C.P. Edin., etc.

Rochester, December 27, 1860.

THE COLLEGE OF PHYSICIANS.

[To the Editor of the Medical Times and Gazette.]

Sir,—When any member of the general community feels aggrieved by a public body, he finds relief and protection by appealing to the *Times*. As a member of the Medical Profession of twenty-five years' standing, I feel a right to make appeal to the Medical public through the *Medical Times and Gazette*.

The oppression of which I am about to complain is, it is true, of a personal nature, yet in some measure it is shared by many others more or less similarly circumstanced. To be as brief as possible, my case is this. After graduating at one of the English Universities, I presented myself at the College of Physicians of London, and was examined and duly admitted as a Licentiate, and paid £56 17s. I received a diploma from the College, which contains, among other passages, the following:—"Sciant omnes Nos . . . . . ei concessisse liberam facultatem et licentiam tam docendi quam exercendi scientiam et artem medicam, eidemque summis honoribus et titulis et privilegiis. . . . frui dedisse."

It appears that the College now wants my title,—viz., that of Licentiate,—for another purpose; at least, I am so informed by your leading article last week. In this difficulty they wish me to take another title, (and which is, therefore, not the highest,) and to take in lieu of my former diploma a certificate of most barren description, and which, shorn of its feathers, reads thus:—"Sciant omnes Nos examinasse et approbasse C. D. et . . . . . ei concessisse has literas testimoniales." Not a word about privileges, titles, and honours; nothing about free licence to practise, and teach the art and science, etc. I am, as it appears to me, to cede my right to such distinctions.

All this is bad enough, but I have also to complain of the mode which was adopted to get me to acquiesce in a measure to suit their own purposes. A blank form was sent to me in a letter, which letter contained two bye-laws, and it was intimated that I was to return the form signed. The form, when signed, would be a promise from me to obey all future bye-laws. The circular hinted that if I did not speedily return the paper duly signed it would be assumed that I refused to accept the new title of Member instead of Licentiate. As I am not in the habit of signing papers without being aware of what I am undertaking by so doing, and as I had never seen a copy of any new bye-laws, I simply took time to consider. At the end of a week I received a second, and soon after a third, circular, each containing the same blank form; but the last issue contained a whole chapter of bye-laws, which were all new to me; and, among other matters, the new form of diploma already quoted; and, to my amazement, the following law in full:—"XXVIII. The fee to be paid for admission as a Member of the College shall be thirty guineas"!

I looked in vain for a clause exempting me from this exaction. No such is to be found. It is true that, in the first circular, there was an acknowledgment of insufficient consideration and forgetfulness with respect to these laws; and this clause for exemption of those who have, like me, paid nearly £60 may be in the class of things imperfectly understood or forgotten; but it is abundantly clear that, by signing that slip, I should have rendered myself liable for a further payment of thirty guineas, making in all £88 7s. If I am wrong in stating this, I should like to have the clause of exemption pointed out. If such was intended to have been inserted and and has not been, I have little faith in the New Laws, and should not like to sign my adhesion to them blindfold; but, if the omission of it is purposely made, I complain of the gross injustice to the class of Licentiates to which I belong. To compare my case with a neighbour's—My neighbour was admitted to the Membership on payment of £15, and without examination. I have had to submit, to use the mildest term, to the pains of an examination and the penalty of £56, and now am in a far worse position than he. He is a member. I may attain to his rank by paying £30, just double what my neighbour paid, so that, what I have paid and my examination have done me more harm than good; and, unless I submit to the terms proposed, it is intended to level me to a class of General Practitioners.

I remember when I was admitted to the College I had to go upon my knees and answer to a question commencing, "*Dabis fidem;*" surely there should be a little of this on both sides, and not only *bona fides*, but courtesy. Might the College not have explained their wishes, and, if they wished to take from us any privilege, to have offered some equivalent, and, at least, to assume that we were gentlemen. But, to send a printed slip, and to say, "Unless you sign the enclosed, I shall assume that you refuse, proceed to deprive you of certain privileges, and place you on a level with a class we think beneath ourselves; but, if you will send us £30, and be quick about it, we will keep our word with you." Such conduct surely should be resented, and I will appeal to the good feeling of the Profession to interpose to prevent a combination of a large body of men against the smaller number threatened as I am.

I am, &c.

An M.D. and L.R.C.P. (by Examination.)

APOTHECARIES *versus* PHYSICIANS.

[To the Editor of the Medical Times and Gazette.]

Sir,—Observing by notices in your pages that the London College of Physicians propose making a third class of Practitioners, who will compete with Licentiates of the Apothecaries' Society, and that legal proceedings are likely to ensue between the belligerents, I would beg leave to sketch, for the information of parties taking an interest in these questions, an outline of a somewhat similar procedure betwixt our Faculty and the Glasgow University, which the House of Lords ultimately decided, and effectually put an end to all future dispute. However, permit me here to state, for the benefit of readers beyond the Tweed, that the Glasgow Faculty of Physicians and Surgeons was instituted by a Charter, dated 1599, ratified by an Act of the Scottish Parliament in 1672, and which conferred the right of examining and granting letters testimonial in Surgery to all persons who followed that Art in the prescribed limits, and of inhibiting any one practising Medicine within the same boundary, without possessing letters testimonial from some University. These privileges remained unquestioned until about fifty years ago, when parties having the degree of Doctor of Medicine, claimed to practise within the limits of the Faculty's Charter, not merely as Physicians, but likewise as Surgeons, on the alleged ground that their degree was a super-eminent qualification, which must be held to comprehend the power to exercise every branch of the healing art. An action was consequently brought before the Courts in Scotland, where the Judges decreed, notwithstanding Doctors of Medicine might practise as Physicians, yet they could not act as Surgeons within the limits of the Charter, unless they had the Faculty's licence. To escape from this legal difficulty the University of Glasgow began, in 1816, to issue the Degree of Master in Surgery; and the holders of such diplomas contended that it entitled them to practise independent of the Faculty's licence, inasmuch as, although Graduates in Medicine were not so empowered, those in Surgery acted under different circumstances. This assumption led to renewed litigation, in order to try the validity of these new Degrees in Surgery, and whether they constituted sufficient qualification throughout the four western counties of Scot-

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land, in spite of the Faculty. This plea was decided first in the Scottish Supreme Courts of Law, and afterwards by the House of Lords, during 1840, in favour of the Faculty; while the same high authority further declared that the possession of a Degree in Surgery, conferred by the Glasgow University, did not exempt the holder thereof, from the necessity of undergoing an examination, and of being licensed by the Faculty, whose monopoly thus became confirmed. Therefore, before getting entangled among the meshes of English Law-Courts, the above decisive case, which bears considerable resemblance to the one now at issue in your metropolis, should be maturely weighed by the intending litigants. Moreover, supporters of either side ought to remember, if the ultimate tribunal of appeal at Westminster disallowed the Glasgow University's attempt to create a new order of Practitioners heretofore unknown at that *Alma Mater*, it is not very likely any other Medical Corporation will be permitted by the Lord-Chancellor to augment the number of grades belonging to their body *proprio motii*, whatever zealous partisans of novelty may assert to the contrary. Trusting the facts thus briefly narrated may be considered interesting to my Southern brethren,

I am, &c.

Glasgow, January 7. SCOTUS.

VIVISECTION.

LETTER FROM MR. GAMGEE.

[To the Editor of the Medical Times and Gazette.]

SIR,—Will you favour me by space in your next impression for the subjoined correspondence? I have always entertained a horror for vivisections, as practised for the students' benefit in the French Veterinary Schools, and in proof of which, during my stay in those Schools, though I performed experiments on pyæmia, referred to in the late Professor Bonnet's memoir on the subject, and pursued other inquiries, I endeavoured to prove the absurdity and cruelty of unnecessary operations.

The researches which I refer to in my letter to Mr. Middleton, related to Professor Lister's inquiry on the Coagulation of the Blood,—Professor Simpson's interesting experiments on the use of metallic sutures and ligatures, and my own researches on poisons, and on the migration of parasites. Some minor subjects have led to the institution of an occasional experiment, but always with a well-defined object in view.

I give publicity to this statement, and to the subjoined correspondence, in order to ensure that the interests of science should not be lost sight of, and frustrated by extravagant reports, and a false or maudlin humanity. It is my intention shortly to establish a Physiological Laboratory in connexion with this College; but under such direction that no experiment on living animals shall be wantonly performed, and, as any experimentalist must be aware, with a wide field for physical and chemical experiments independently of vivisection. Much unnecessary cruelty, inflicted under the mask of scientific research, though out of pure personal curiosity, may, I believe, be prevented by the step I have long had in contemplation. I am, &c.

Edinburgh New Veterinary College, January 5. JOHN GAMGEE.

Society for the Prevention of Cruelty to Animals,
12, Pall-mall, London, December 21.

Sir,—I am directed by the Committee of this Society to inquire whether vivisection, and with what object, and to what extent, is practised in your College?

The favour of an early reply will greatly oblige the Committee. I have the honour to be, Sir,

Your very obedient Servant,

Professor J. Gamgee. GEORGE MIDDLETON, Sec.

REPLY BY PROFESSOR GAMGEE.

Edinburgh New Veterinary College, December 24.

Sir,—In reply to your questions I have to state that vivisection, as an element of veterinary teaching, is not practised in this College. Sometimes physiological experiments have been performed with some definite object in view, as proved by published researches. Vivisections by students are totally discountenanced and condemned, but every facility is offered to scientific men, well versed in experimental science, to prosecute their researches for the benefit of suffering men and suffering animals.

I have the honour to be, Sir,

Your most obedient Servant,

JOHN GAMGEE.

G. Middleton, Esq., Secretary to the
Society for Prevention of Cruelty to Animals.

THE LATE CÆSAREAN OPERATION.

LETTER FROM DR. JAMES EDMUNDS.

[To the Editor of the Medical Times and Gazette.]

SIR,—Since writing my report on this case, the child has become ill and died. The mother being convalescent, and having resumed her domestic duties, was anxious to have charge of the child herself, and at first suckled it. Her apartment, however, was totally unfit for the reception of so young an infant during the late intense frost; it got chilled, a severe attack of aphthæ came on, it lost the power of sucking, and soon sank. This may appear irrelevant to the operation, but I thought it well to ask you to record the fact. The mother is perfectly recovered.

I am, &c.

JAMES EDMUNDS, L.R.C.P.E., M.R.C.S.E., etc.

2, Spital-square, January 7.

MODERN NEGLECT OF THERAPEUTICS.

[To the Editor of the Medical Times and Gazette.]

SIR,—I trouble you with this letter in order to beg the aid of your extended influence in favour of a much-neglected subject, viz. Therapeutics.

Our Profession goes by the name of the "Healing Art," and we, coming as Students to the various Medical Schools, and desirous, as I hope most of us are, of making the name a reality, are informed that our systematic instruction in this, the most important of all branches of our study, is confided to the Professor of Materia Medica and Therapeutics, and to the Professor of Medicine, and we are told that Therapeutics form a subject for our examinations. Such are the statements; but, on examining candidly how far they are true, what do we find? What is the encouragement we receive to make ourselves well acquainted with our various weapons of combat against the countless forms of disease and death? Virtually none!

Our heads are crammed with long lists of specific gravities of drugs, which we have subsequently neither time nor opportunity to verify, with detailed descriptions of true and false Materia Medica, and with minute accounts of the formulæ, physical characters, and reactions of the often hypothetical principles which they contain; just as if a man would be a better soldier for knowing accurately the shape of his sword-hilt; the relative proportions of iron and copper that were used in the construction of different cannon and mortars, or the details of the manufacture of gunpowder! Meanwhile, in the lectures, the therapeutic action of a drug is too often slurred over, and, in the class examinations, at the end of the session, there is hardly a question on the subject.

In Medicine we find a similar neglect. At one time, hours are spent in detailing the diagnosis and pathological characters of a disease, while our instruction in the treatment is confined to a jumble of drugs, crammed together at the end, (the peculiar circumstances under which each would be useful, being almost or entirely omitted); at another period we receive a prolonged account of the diagnosis of diseases of the heart, for which not a single variation of treatment is recommended.

Nor does the strictness of our examiners make up for the negligence of our teachers. Of what examination does Therapeutics form an integral part? Where is its proper rank assigned? Do we get any questions in Therapeutics at the Hall? None but what a Druggist's youngest apprentice could answer as well as we. Any at the London University? Hardly one! But perhaps the newly-appointed Examiner in Materia Medica may introduce a change in this respect. We

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can hardly expect any at the College of Surgeons; what the College of Physicians will do remains to be seen.

But it may be said that dependence on lectures will make us only empirics, and in the wards of the Hospital we must learn to treat disease: granted. But that makes our case no better. We stand beside the beds, we attend the Clinical Lectures, and listen to the Physicians' exposition of this or that case,—in the diagnosis it is all that can be desired; but in the treatment,—what a falling off is there! In fact, the treatment is frequently left to the Physicians' Assistants, and when the visit is over, we come away, rejoicing, perhaps, at having been instructed in some nice shades of diagnosis, at having heard some muco-crepitation, medium-sized, or a reduplication of one or other sound of the heart; but when we come to actual treatment, we find that, with all our refinement of diagnosis, we know no better how to cure disease than without it.

One thing more only remains to be said, and that is, that in the out-patients' wards we do learn treatment with diagnosis; but attendance in those wards is not compulsory to Students, and is consequently, from the press of compulsory occupation, greatly neglected.

Such, Sir, it appears to me, is the present position of the science of Therapeutics,—whether it is its proper one, I leave for any one who will reflect to say. We regret and wonder at the wide spread of Homœopathy, but is not the cause in ourselves? That we have, to the detriment of the art of healing, extended and refined our diagnosis until Medical men almost think that when they have made out what a disease is, they have accomplished all that can be expected of them; so that our treatment too often retarding—instead of aiding—the operations of Nature, sometimes contrasts unfavourably with the "do nothing" plan of homœopathy.

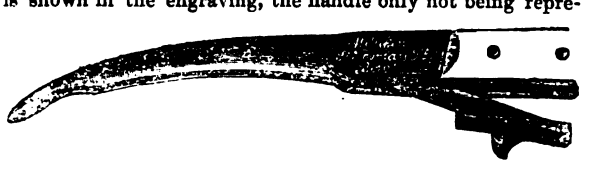
What, then, is the remedy? The following, I think, may be suggested:—That Lecturers, on Materia Medica should pay more attention to Therapeutics, and that the uses—not the physical characters—of drugs should form the principal subject of our examinations in Materia Medica. That clinical lectures should, now and then, touch on treatment as well as diagnosis, and that attendance on out-patients should be compulsory, and count instead of attending on in-patients. These regulations, however, are merely adjuncts. The primary, the essential point, is, to bear in mind that use should be the object of our Profession; that he, who, by the discovery of a new drug, or the new application of an old one, enables us to cure or render less dangerous any disease, confers an infinitely greater benefit on mankind than he who can discover the presence of a microscopic amount of bronchitis or pneumonia in a phthisical lung, but cannot point out any remedy for it. If this, then,—the doing the greatest possible amount of good to our fellow-creatures,—is kept steadily in view, the science of Therapeutics will assume speedily its proper rank, and accurate diagnosis will become of value, because of practical import in our treatment of disease. Thus our Profession,—ever foremost in science and greatest in intellect—will become noblest in its object and first in its usefulness, and Homœopathy, with all the other systems which our own neglect of our duty has called into being, will disappear, or merge imperceptibly, into our own.

I am, &c. A Student.

NEW INSTRUMENTS.

MR. LE GROS CLARK'S HERNIA-KNIFE.

This knife, as made by Mr. Millikin, of St. Thomas's-street, is shown in the engraving, the handle only not being repre-



sented. The blade, which may be removed entirely from the handle, plays in the plated sheath, which is notched near its extremity. When pressed home the cutting-edge of the blade is exposed only at this notch.

This instrument combines in one a director and cutting blade. The guard is introduced, as exhibited in the wood-cut, and when the notch is felt to be opposite to the seat of stricture—a circumstance readily recognised in femoral hernia—the blade is then pressed home, and, if requisite, a slight sawing motion will complete the necessary division. Before withdrawing the knife, the blade should be again protected. Mr. Le Gros Clark has used this knife for some time, and finds it both safe and efficient: he described it in a Clinical Lecture published in our last Volume.

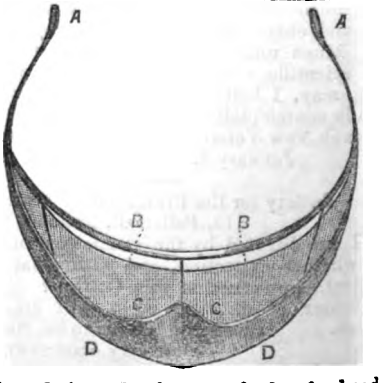
CALKIN'S OCCHIOMBRA;

OR, PATENT TRANSPARENT EYE SHADE.

This Eye Shade consists of a very light wire framework, over which is extended an extremely fine transparent fabric of gauze. A portion of the wire framework rests upon the nose, passes close to the face under the eyes to the temples, supporting the fabric from the lower part of the Shade, thus forming one large closed chamber for the eyes.

The fineness of the fabric will be found to protect the wearer from wind, dust, and sun, but it allows of sufficient ventilation to keep the eyes perfectly cool; and a lengthened opening at the top of the Shade (not observable when worn) provides for the escape of any heat, the want of which is one of the greatest evils in the ordinary Shade.

This Shade will be found of great service in protecting from wind and ashes those who travel by railroad. Travellers in India and Egypt, and Alpine excursionists, will also find it of benefit.



A A, a spring fitting closely round the forehead, just above the eyebrows, and a portion of the head.

B B, another portion of the framework, slightly in advance of A A, leaving an open space between the two for the free escape of generated heat, also supporting the fabric of gauze, or other material, to B D.

C C, another portion of the framework, of flexible material, resting on the nose, and taking the shape of the face, under

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the eyes, to the right and left temples, supporting the fabric from D D, and forming the closed chamber.

D D, the portion of the framework which constitutes the external outline of the shade, assisting to support the fabric.

MEDICAL NEWS.

UNIVERSITY OF ST. ANDREWS.—The following is a List of gentlemen on whom the Degree of Doctor of Medicine was conferred on the 2nd inst.:—

Name.	Degree.	Residence.
Belcher, John Waring	L.R.C.S.I.	London
Bell, John Henry	M.R.C.S. & L.A.C.	Bradford, Yorkshire
Bennett, William R.	L.R.C.S.I.	Royal Navy
Boycott, Thomas	M.R.C.S. & L.A.C.	Bombay Army
Broad, James	M.R.C.S. & L.A.C.	London
Bush, Danvers Ward	M.R.C.S. & L.A.C.	Weston-on-Batt
Caldwell, W. T. D	M.R.C.S.	London
Callon, William Joseph	M.R.C.S. & L.A.C.	Liverpool
Capper, Jasper		Liverpool
Cockroft, John	M.R.C.S. & L.A.C.	Middleham, Yorkshire
Cotton, Thomas	M.R.C.S. & L.A.C.	Spalding, Lincolnshire
Fox, Charles Henry	M.R.C.S.	Brislington, Somerset
Greene, James A.		Calcutta
Hatton, John	F.R.C.S. & L.A.C.	Manchester
Hutchinson, Valentine	M.R.C.S. & L.A.C.	Bishop-Auckland
Iles, Albert	M.R.C.S. & L.A.C., L.R.C.P. Ed.	Cirencester, Gloucester
Kidd, Henry A.		Calcutta
Lemon, Henry M.	L.A.C.	Welshpool
Mackertich, Simon	M.R.C.S.	H.M. Indian Army
Minnis, Belgrave		London
Payne, Edwin	M.R.C.S., L.R.C.P. by ex.	London
Pell, Walton N.	M.R.C.S.	Northampton
Pollock, Arthur J.	M.R.C.S. & M.R.C.P.	London
Prall, Samuel	M.R.C.S. & L.A.C.	West Malling, Kent
Simpson, Pierce A.	M.R.C.P.E., M.R.C.S. Ed., & B.A. Cantab.	Dublin
Tanner, Mark B.	M.R.C.S.	Exeter, Devon
Truman, Edgar B.	M.R.C.S. & L.A.C.	Nottingham
Vanderstraaten, John		Ceylon
Walker, George C.	M.R.C.S.	Kirkdale, Liverpool
Warner, John	M.R.C.S. & L.A.C.	Leighton-Buzzard
William, John	L.A.C.	Dyffrynn
Williams, Charles R.	M.R.C.S. & L.A.C.	Leamington.

APOTHECARIES' HALL.—The under-mentioned gentleman passed his examination in the Science and Practice of Medicine, and received a Certificate to Practise on Thursday the 3rd inst.:—

Morgan, John, Clifton, Bristol.

The following Gentlemen also on the same day passed their First Examination:—

Hatchell, Joseph, Ravenstone, Leicestershire
Waller, Charles Beaumont, Finsbury-square.

APPOINTMENT.

BARNES.—On January 8 Mr. J. H. Barnes was appointed Honorary Assistant-Surgeon to the Liverpool Infirmary for Children.

DEATHS.

ADAMS.—December 28, Adam Adams, of Wootton-under-Edge, Gloucestershire, Senior Alderman of the Borough, aged 77.

BANNING.—January 1, at Fairfield, near Liverpool, Thomas Haines Banning, M.D. Edin., M.R.C.S. Eng., Hon. Consulting Physician to the Liverpool Royal Infirmary, aged 77.

BURNHAM.—Recently, Robert Burnham, of Holme, Spalding Moor, Yorkshire, L.S.A. Lond., aged 61.

DAUNT.—January 1, at Fahalea, Ireland, Thomas A. Daunt, M.D., aged 80.

HARRISON.—December 30, at Gargrave, Yorkshire, Charles Harrison, M.B. Edin.

IRELAND.—January 4, John Ireland, of Tabernacle-row, Finsbury, L.S.A. Lond., aged 69.

M'GREGOR.—January 5, at Glasgow, Dr. Robert M'Gregor, Staff-Surgeon H.M. Indian Service, aged 35.

McQUEEN.—December 31, Duncan McQueen, of Dollar, Clackmannanshire, L.R.C.S. Edin., aged 57.

NOBLE.—January 6, while travelling in Spain, Joseph Wm Noble, of Leicester, M.P. for that place, M.B. Cantab., M.R.C.S. Eng., L.S.A. Lond.

RYAN.—December 23, at Kilkenny, Thomas Ryan, L.R.C.S. Edin., late Assistant-Surgeon, 2nd Battalion, 6th Regiment

SCHEMBRI.—Recently, Joseph Schembri, Army Apothecary on half-pay.

SHUTE.—December 29, Theodore Henry Shute, of Knowles Villa, Newton Abbott, Devonshire, M.D., aged 48.

SPRAGG.—December 27, Joseph Philip Crook Spragg, of Trowbridge, aged 44.

WHITELAW.—January 2, suddenly, Alexander Whitelaw, of Kilmarnock, Ayrshire, Surgeon in the public service.

HARVEIAN SOCIETY OF LONDON.—The following Officers for 1861 were elected at the annual meeting:—*President*:—E. H. Sieveking, M.D. *Vice-Presidents*:—E. Headlam Greenhow, M.D., J. C. Langmore, M.B., Weeden Cooke, Esq., H. C. Stewart, L.R.C.P. Ed. *Treasurer*:—Henry William Fuller, M.D. *Honorary Secretaries*:—W. Wadham, M.D., G. T. Browning, M.D. *Council*:—William Adams, Esq., Albert J. Bernays, M.A., Ph.D., Charles Browning, Esq., H. H. Harrisson, Esq., E. S. Haviland, M.D., W. Sedgwick, Esq., Frederick Cock, M.D., Alfred Collinson, M.D., J. Brendon Curgenven, Esq., Thomas K. Hornidge, M.B., W. Boyd Mushet, M.B., and William O. Priestly, M.D.

SUDDEN DEATH OF DR. ANDREWS, OF QUEEN'S COLLEGE, BIRMINGHAM.—Dr. Andrews, Professor of Physiology at the Queen's College, and one of the Physicians of the Queen's Hospital, died suddenly on Wednesday evening the 19th ult. He was apparently in good health that morning, and attended to his patients in the Hospital; but on his return home he was taken suddenly ill. Mr. Wilders, House-Surgeon at the Queen's Hospital, was immediately called in, and Dr. Fleming, Dr. Bell Fletcher, and Mr. Yates also attended, but despite all their efforts, Dr. Andrews died about seven o'clock. An inquest was held on the 22nd ult., when, on the opinion of the Medical witnesses, that the death of the deceased was caused by extravasal apoplexy or effusion of blood on the brain, the jury at once returned a verdict of "Died by the Visitation of God."

GOLDSMITH'S APOTHECARY.—In the "Citizen of the World," Letter 53, "On the absurd taste for obscene and pert novels," Goldsmith says, "An author who writes in this bawdy manner is generally sure, therefore, of having the very old and the impotent among his admirers; for these he may be properly said to write, and from these he ought to expect his reward; his works being often a very proper succedaneum to cantharides, or an assafœtida pill. His pen should be considered in the same light as the squirt of an apothecary, both being directed to the same generous end." What beastly practice of the apothecaries of his day does Goldsmith allude to? The very fact of his being able to throw such a lump of dirt at them shows how different was the social position of the Apothecaries of a century back to what it is now, and how well it would be to get rid of the old opprobrious name What man writing himself L.A.S. would like to be sent to by some ancient debauchee, who had stumbled on this passage, with directions to bring his squirt with him?

CASE OF SUPPOSED DEATH FROM CHLOROFORM.—A strong man, forty years of age, living near Bordeaux, crushed his leg by a fall from a horse, syncope coming on at the time of the accident. Six or eight hours afterwards, when amputation was about to be performed, he was in a condition of excessive moral disturbance and extreme alarm, and forbade its performance unless previously put to sleep. The Surgeons not desiring to employ chloroform in such a condition of prostration, resolved merely to pretend to do so in order to satisfy the patient. Scarcely, however, had he made four inspirations of a diluted chloroform, held at a long distance from his mouth and nostrils, than the respiration and circulation became suddenly arrested, and so remained in spite of all means employed. How far the chloroform was really concerned in the production of this catastrophe we must leave to our readers to judge.

BOOKS RECEIVED.

A System of Surgery. Vol. I. London: 1860.
On Diseases of the Joints. By R. Barwell, F.R.C.S. London: 1861.
Mysteries of Life, Death, and Futurity. By H. Welby. London: 1861.
The Culture of Indigo. By J. Shortt, M.D. Madras: 1860.
The Wonders of the Microscope. Part XII. London: 1861.
Nature in the Cure of Disease. By J. M. Strachan, M.D. Edinburgh: 1861.
On Capital Punishment for Murder. By Lord Hobart. London: 1861.
London Medical Practice. London: 1861.
The Oyster. London: 1861.
The Movement Cure. By C. P. Collins, M.R.C.S. London: 1860.

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VITAL STATISTICS OF LONDON.

Week ending Saturday, January 5, 1861.

BIRTHS.

Births of Boys, 1003; Girls, 889; Total, 1892.
Average of 10 corresponding weeks, 1850–59, 1650·4.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	843	864	1707
Average of the ten years 1850–59	633·4	628·7	1262·1
Average corrected to increased population..	..	..	1388
Deaths of people above 90	3	8	11
Deaths in 15 General Hospitals	37	51	88

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1851.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	376,427	1	17	15	3	10	5	..
North ..	490,396	4	10	17	..	21	6	4
Central ..	398,256	..	18	7	2	11	5	..
East	485,522	1	7	7	1	31	2	6
South ..	616,685	..	1	16	6	17	9	9
Total.. ..	2,362,286	3	52	63	12	90	27	16

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29 714 in.
Mean temperature	32·4
Highest point of thermometer	47·3
Lowest point of thermometer	25·0
Mean dew-point temperature	29·2
General direction of wind	N.E.
Whole amount of rain in the week	1·07 in.

TO CORRESPONDENTS.

Dr. Myrtle.—The address is Mr. Beardmore, 27, Albion-street, Hyde-park.

A Constant Reader wishes to know the precise difference between Mr. Luke's and Mr. Salter's fracture apparatus for the lower extremities.

Dr. Hildige's Case of Snow Blindness shall appear as soon as possible.

Dr. Munro.—So much doubt has been thrown on the veracity of the patient, that we see no good reason to alter the opinion we formerly expressed in reply to other correspondents. We have received no previous letter from Dr. Munro on this subject.

Dr. Washbourne's note shall appear next week.

Medicus will find many letters on Ascarides in our volumes for last year.

Suspected Cholera at West Ham.

In the paragraph with this heading, which appeared in our Number for December 22, we are informed that we gave to the locality in question a character for insalubrity which it does not deserve. So far from it being an undrained marsh, we are told upon the testimony of old inhabitants, that "no water can be obtained unless a well be sunk at least sixteen feet;" we learn, moreover, that the inlets to the cesspools of the houses, in which the cases of disease occurred, are trapped; and that the "cesspools are not close to the pump-wells, one being at the side of the house opposite to the entrance-door, and the other being at the back of the house."

Professional Status.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I think by this time it must be patent to everyone that the Medical Act is a grand failure. Illegal Practitioners practise, and legal Practitioners assume titles to which they have no claim. Now, if we dispassionately ask ourselves why this untoward state of things has resulted, we cannot deny that it is to the selfish policy of our Colleges and Universities that it is to be attributed. I know no more humiliating phase in the history of Medicine than the open struggle for money that our time-honoured institutions have carried on since the passing of the Bill. "Get money!" they cry, "*Si possis, recte, si non, quocunque modo.*" It must be evident to all right-thinking men that the only way to create union in our Profession is to assimilate it to the Church and Bar. The "Poor Curate," who aggravated the Guy's student by disparaging his mother, forgot that *his* social *status* was equal to his rector's, because they had passed through the same portal to the same goal. He was a curate because he had not interest, and poor for the obvious reason that he had no money.

At the Bar, Mr. Badger will naturally take to the criminal business, Mr. Bedwin Names to the facetious civil (often uncivil) cases, and Sir Richard Petill to those in equity. Not one of these men has passed through a different course of education; but circumstances, whether those of connexion or natural predisposition, have caused them to adopt the *specialité* for which they have become celebrated.

I think it will be perceived that what I believe to be the only solution of our Professional miseries is an absolutely similar course of study, examination, and title for every Medical man. The abilities, and even more frequently the "*res angusta domi*" will decide for him the line he may adopt. I should insist upon Collegiate training and an Arts Examination as being necessary preliminary to Medical education. It is one of the great mistakes in our present system that raw, uneducated boys should begin a study, especially the study of disease in Hospitals, before they have been taught to reason; before they have attained that steadiness of demeanour which must have an effect upon their patients, and also before they have attained the power of using their own observative powers, parroting, as it were, the opinions and *dicta* of their teachers.

I am afraid my opinions are heterodox,—nevertheless, if the study of Medicine is to be carefully carried out, and the position of the Profession, whether in its highest or lowest grades is to be saved from the scoffing compassion of our greatest satirist (*vide* the *Cornhill Magazine*), to some such arrangement we must come, or—grin and bear it.

I am, &c.
January 1. M.D., M.R.C.S., L.S.A.

Physician or Apothecary?

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I have read with much pleasure, in your Journal of the 5th inst., your remarks on the proposed new licence of the London College of Physicians, and quite concur in your views on the subject.

As a L.R.C.S. Edin., and L.S.A., of ten years' standing, I have not the least objection to pass a practical examination, in order to disconnect myself with the Apothecaries' Hall, and to acquire a title which would confer upon me a position which I feel I do not occupy at present; but, as it is merely a question of social *status*, and, I believe, I should gain nothing pecuniarily by the title (and I have no doubt that many others would agree in this opinion), it occurs to me that the fee should be lowered in the case of present Practitioners, who are Licentiates of the Hall, to the extent, at least, of the fee which has already been paid for that diploma; *e.g.*, as proposed, the new licence is to cost £15; the sum which I paid for the Hall diploma was £6 6s. Now, I think it but fair that this sum should be deducted from the College fee, otherwise, future Practitioners with one qualification will occupy, at much less expense, a position equal to that of the present L.S.A., who may become L.R.C.P.

I am, &c.
January 5. A Dissatisfied L.R.C.S.E. and L.S.A.

COMMUNICATIONS have been received from:—

M. Claude Bernard; Mr. Le Gros Clark; Dr. Hobson; Mr. Sandi Cox, Birmingham; Mr. Wilde, Dublin; Dr. Hildige, Dublin; Mr. Field, Brighton; Mr. Solomon, Birmingham; Dr. Worms, Paris; Mr. Hulme; Dr. Usher; Dr. Duigan, Gainsborough; Mr. H. Lobb; Dr. Munro, Hartlepool; Dr. Edmunds; Dr. Washbourne, Gloucester; Mr. Bushe; Mr. Chalmers; Mr. Kent; Dr. Baines; Mr. Potter, Kilkenny; Dr. Smythe; Mr. Parker; Mr. Gilbert; Mr. Olley; Mr. Chapman; Mr. Moore; Mr. Browne; Mr. Vyner; Dr. Myrtle; Dr. Devenish; Mr. Barnes; Mr. Vincent; Mr. Workman; Mr. Fortescue: Dr. Carson; Mr. Hayter; Mr. Ragoett, etc.

APPOINTMENTS FOR THE WEEK.

January 12. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-Cross, 1 p.m.

14. *Monday*.

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

Medical Society of London, 8½ p.m. Clinical Discussion.

15. *Tuesday*.

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

Pathological Society, 8 p.m. Council Meeting, 7½.

16. *Wednesday*.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m. Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

Hunterian Society, 8 p.m. Mr. Hutchinson "On the Diseases usually denominated Scrofulous."

17. *Thursday*.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.

King's College Medical Society. Mr. Yeo "On Typhoid Fever."

Harvean Society of London, 8 p.m. Dr. Levison "On the Ethnology of the Malays of the Cape."

18. *Friday*.

Operations, Westminster Ophthalmic, 1½ p.m.

Royal Institution, 8 p.m. Professor Tyndall "On the Action of Gases and Vapours upon Radiant Heat."

Western Medical and Surgical Society, 8 p.m. Mr. Prescott Hewett, F.R.C.S. "On a Case of Purulent Infection in connexion with Discharge from the Ear, with Remarks."

EXPECTED OPERATIONS.

Westminster Hospital.—The following Operations will be performed on Tuesday next, at 2 o'clock:—

By Mr. Holt—For Stone in the Bladder; Removal of a Nævus from the Head; Contracted Neck from a Burn.

Metropolitan Free Hospital.—The following Operations will be performed on Monday next, at 2 o'clock:—

By Mr. Childs—For Spina Bifida; Plastic Operation for Removal of Cicatrix.

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ORIGINAL LECTURES.

LECTURES
ON
THE SPINAL CORD,
DELIVERED AT
The College of France,
DURING THE SUMMER SESSION 1860,

By M. CLAUDE BERNARD,
Member of the French Institute; Professor of General Physiology at the Faculty of Sciences, &c.

Lecture III.

ON RECURRENT SENSIBILITY.

Summary: Experiments on the Functions of the Spinal Cord—The Posterior Roots connected with Sensation, the Anterior ones with Voluntary Motion—Experiments which support this Fundamental Proposition—Recurrent Sensibility—The Experiments which set forth the Existence of this Property can only be performed on the higher Animals—Precautions which must be taken to keep alive the Animal's Sensibility—The Facial Nerve becomes insensible during a short lapse of Time, when the Spinal Canal has been opened—Various Opinions touching the Source of Recurrent Sensibility—It is generally believed to arise from the Reflection of a few Sensitive Fibres which turn back after reaching the Surface of the Body—Various Facts adduced in Support of these Views—Characteristics of Motor and Sensitive Nervous Fibres when examined under the Microscope—Motor Fibres broad and flat, Sensitive Fibres narrow and cylindrical—Sensitive Fibres always met with in the Motor Roots, and *vice versâ*—Professor Arnold's Opinions on this Subject discussed—The Physiologist cannot admit the Existence of Compound or Mixed Spinal Roots—The Section of the Posterior Roots destroys all Sensibility in the corresponding Motor Nerves—Consideration on the Structure of the Spinal Cord—its Sensibility derived from the Posterior Roots—The Existence of Recurrent Sensitive Fibres is, perhaps, required to give Sensibility to the Anterior Tracts of the Spinal Cord—For similar Reasons, Recurrent Motor Fibres are required to bestow the Power of Contraction on the Vessels which supply the Posterior Columns—The Experiments required to prove this have not, however, been yet performed—Various Experiments on Recurrent Sensibility.

Gentlemen,—In concluding our last Lecture we promised to repeat in your presence the principal vivisections connected with the physiological doctrines towards which your attention has been directed: we are now prepared to fulfil the engagement.

Among the various experiments which have led us to more accurate notions concerning the functions of the spinal cord, the first in date, as well as in importance, is that which consists in setting forth the difference between motor and sensitive nerves, by separately dividing the anterior and posterior spinal roots. In demonstrating so elementary a proposition, it is hardly necessary to employ animals belonging to the higher classes: the lower orders of vertebrata exhibit this property in the same degree; and although the operation has usually been performed on mammals, we shall content ourselves, in the present instance, with repeating it on frogs.

[Two of these animals are now brought in, and placed upon the table; one of them has undergone a double mutilation, the anterior roots corresponding to the lower extremities having been cut through on the right side, and the posterior ones on the left; the other frog has not been interfered with.]

You perceive, Gentlemen, that on pinching the left leg of this frog with a pair of forceps, the animal evinces no pain whatever; all sensibility has therefore disappeared in this region, subsequently to the operation performed on the posterior roots: while, on the other hand, if we repeat the experiment on the opposite side, a contraction is immediately produced, not in the right limb itself, which remains motionless, but in the left one: sensation, therefore, has been abolished on one side, and motion on the other — the posterior roots having been divided in the first case, and the anterior ones in the second. It is therefore evident, that sensation is exclusively the privilege of the posterior spinal roots, and motion of the anterior ones. We think it unnecessary to dwell any longer upon this point.

But the delicate experiments in which the recurrent sensibility of motor nerves is exhibited, can no longer be performed upon batracians; animals of a higher class must be selected for this purpose: and great precautions are indispensable when it is desired to place these interesting phenomena in a proper light. After opening the vertebral canal, and laying bare the spinal cord, the animal must be allowed to recover its forces before commencing the experiment. The sudden depression of the vital powers which follows this operation has already been mentioned; and a remarkable instance of this fact is afforded by the effects produced on the facial nerve: this branch in its physiological state possesses a large amount of recurrent sensibility; but when the spinal canal has been laid open, it suddenly becomes insensible, although no direct interference with its own fibres has taken place, and does not resume its usual properties till the animal has recovered from the shock. The temporary paralysis which occurs in the anterior spinal roots, when laid bare after a tedious operation, is therefore a natural result of the nervous exhaustion which constantly accompanies intense suffering, and disappears after a certain lapse of time.

The animal now placed before you (a middle-sized dog), has undergone the operation about two hours ago, and has recovered in a great measure from its immediate effects; besides, we shall not perform the experiment before the end of the Lecture.

The immediate causes of recurrent sensibility, as we stated the other day, are still deeply involved in doubt; but the most plausible explanation hitherto brought forward, consists in attributing this property to the presence in the motor trunks, of a certain number of sensitive fibres, which after reaching a given point, turns back, and runs parallel to the voluntary nerve up to the central axis from which both are derived. The valuable labours of modern micrographers on the structure of the nervous element, have shown that in the sensitive apparatus the primitive tubes are narrower and of a more cylindrical form than in the opposite system; but if these data are to be relied upon, the spinal roots are never exclusively composed of sensitive or motor filaments: the anterior roots contain a few cylindrical tubes, and the posterior roots a small number of flat ones.

Professor Arnold endeavours to remove this apparent contradiction by supposing that the various branches which arise from the spinal cord are not to be viewed as mere agglomerations of sensitive or voluntary fibres; but that the anterior roots, being chiefly intended to supply the muscles with nervous influence, contain a larger amount of voluntary fibres than the posterior ones, which are chiefly distributed to the skin. It is not surprising, therefore, to meet with sensitive fibres in the motor nerves, the muscular tissue being endowed with sensibility, nor with motor fibres in the sensitive nerves, the skin itself being possessed of a certain degree of contractile power.

This ingenious hypothesis does not, however, agree with the phenomena of recurrent sensibility; if sensitive fibres are met with in motor branches, and *vice versâ*, the reason is that a certain number of nerve-tubes, reaching their respective destinations, are reflected, and fall back upon the ramifications of the opposite apparatus; but we should not be justified in supposing any sensitive fibres to be directly derived from the anterior tracts of the spinal cord. If this were the case, the sensorial power of the anterior roots would not disappear when its posterior roots are divided; and when the experiment is repeated on the motor branches alone, sensibility would be found to reside, not in the peripheric, but in the central extremity of the divided nerve. It seems therefore evident, that the sensitive fibres which lie within the motor nerves are derived from the posterior tracts; and if this is the case, there is no difficulty in supposing a similar arrangement to exist with respect to motor fibres. Such is, probably, the origin of the flat tubes discovered by micrographers in the midst of the narrow cylindrical filaments of the sensitive apparatus. We shall presently see what the physiological functions of these reflected motor nerves may be supposed to be; but this question leads us to examine not the *functions*, but the *properties* of the spinal cord, for the properties of our organs are not identical with the functions to which they are devoted; the part which an apparatus plays in the economy does not always enable us to foresee the effects which external agents produce upon it. Now, the spinal axis is in reality a distinct apparatus—an organ closely connected with, but not resembling, the nerves in its intimate essence and internal structure. Anatomists have long been accustomed to view the columns which succeed to the spinal nerves as the direct continuation of their fibres—an

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opinion which we know at length to be altogether erroneous; for, as we shall endeavour to convince you in a future part of this course, the posterior tracts which transmit sensations to the brain are not capable of perceiving sensorial impressions themselves when acted upon by direct stimuli; their properties are, therefore, widely different from those bestowed on the circumferential ramifications of the nervous system.

The spinal cord is, therefore, composed of special nervous fibres, and of certain peculiar cells from which the spinal nerves set forth; it also contains nutrimentary vessels, cellular tissue, and other accessory elements. Now, the primitive cells from which the sensitive nervous fibres are derived give off a few of these to the spinal marrow itself, which would otherwise be totally deprived of ordinary sensibility; and likewise the cells which send forth the anterior and motor fibres give off a few of these to the corresponding portions of the spinal cord; these motor fibres are distributed to the vessels of course, for in the vessels alone is their agency required: they belong therefore to the interesting class of *vaso-motor* (a) nerves, of which more hereafter. In short, gentlemen, if the vascular tissues are themselves provided with their own vessels (vasa vasorum), the great nervous centres are equally provided with their own nerves (nervi nervorum); the posterior tracts are in this manner supplied with sensitive nerves, and the anterior columns with motor ones; but the cells connected with the posterior portion of the central axis do not appear to extend their ramifications into its anterior division: hence arises the necessity of *recurrent fibres*, which bestow upon a considerable portion of the spinal cord that sensibility of which it might otherwise be entirely deprived. Such, if our hypothesis were correct, would be the key to these singular phenomena; and, for reasons similar to those just adduced, a certain number of recurrent fibres are derived from the motor system; the contractile tissue of the vessels which ramify over the posterior tracts is in this manner supplied with nervous influences. These views, although perfectly consonant to all that is known with reference to recurrent sensibility, have not as yet been sanctioned by direct investigation; it would for this purpose be necessary to perform an experiment which has never yet been tried—namely, to galvanise one of the anterior roots, and note the effects produced upon the corresponding vascular apparatus, in the posterior region of the spinal marrow; and, whether contraction or dilatation of the vessels took place, the existence of recurrent fibres would be fully demonstrated with respect to the motor nerves, as well as in the case of the sensorial apparatus. In this manner would Anatomy and Physiology be made to agree, for no physiologist can believe the spinal nerves to be of a mixed nature from the very beginning; how, in this case, would sensibility be totally destroyed in all parts of the system by cutting through the posterior roots? a fact which we shall now demonstrate by direct experiment.

We are now going to perform the various experiments hitherto described; but before commencing them, we must adapt the cardiometer to one of the carotids, in order to show you the delicate sensibility which the heart enjoys.

[The common carotid on the left side being opened, a glass tube is introduced into the vessel; the tube communicates by means of an india-rubber tube with an ordinary manometer. A few drops of a solution of carbonate of soda had been previously introduced into the apparatus, to prevent the blood from coagulating. The incisions made for the purpose of laying bare the artery do not appear to have been felt by the animal: its nervous powers must therefore be deeply exhausted, according to the Professor's remark.

The wound inflicted on the lumbar region is now uncovered: two pairs of spinal nerves are visible; a thread has been passed separately under each root. The posterior roots being excited, the animal utters loud cries, and the mercury rapidly ascends in the cardiometer. The anterior root is now excited; and although the animal utters no cry, still the rapid oscillations of the mercury in the instrument testify the pain experienced. It is, however, a proof of nervous exhaustion in the subject (says M. Bernard) that no cries have been uttered when the anterior roots were acted upon.

The motor nerve is then cut through, which gives rise to acute pain: the animal is allowed to rest for a moment; after which, the central extremity is pinched: no effect whatever is produced; but upon touching the peripheric extremity, the animal appears to suffer intensely. After repeating these experiments several times in succession, the posterior root is divided; and after a moment's rest, the sensibility of the nerves being again explored, is found to reside exclusively in the central portion of the posterior root. But at this stage of the experiment the mercury falls rapidly in the tube; and the animal being altogether exhausted, the remaining experiments are put off to a future meeting.]

(a) We trust this neologism will be favourably received, as it would be difficult to express the idea in other words.

ORIGINAL COMMUNICATIONS.

AN EXPERIMENTAL INQUIRY INTO THE VALUE OF INCISION OF THE CILIARY MUSCLE,

IN THE TREATMENT OF CERTAIN DISEASES OF THE EYE AND DISORDERS OF ITS ACCOMMODATION.

By JAMES VOSE SOLOMON, F.R.C.S.

Surgeon to the Birmingham and Midland Eye Institution.

I ENTERED upon an experimental inquiry into the value of incision of the ciliary muscle in the treatment of certain diseases of the eye and disorders of its accommodation, on March 1, 1860; and having soon satisfied myself that the operation could be performed with safety on out-patients, provided proper precautions were taken against inflammation, and having been led, at an early period of my observations, to a conviction that the nutrition of the tissues of the eye was improved by the performance of intraocular myotomy, the cases in which the operation was tested have been not a few, and in nature various. During the first three months of my investigations I incised the ciliary muscle, always in one method, namely, by entering a Beer's cataract-knife at the corneo-sclerotic union, and then pushing it through the pillars of the iris into the muscle; the flat surfaces of the blade being opposed on one side to the sclerotic, and on the other to the rim of the lens. The incision in the muscle was limited to two lines (one-sixth of an inch), or two lines and a-half. In some few cases I think the puncture may have been even less than one-sixth of an inch. To this operation I have given the name of Intra-ocular Myotomy, in contradistinction to that in which the muscular circle is cut asunder by an incision radiating from the cornea. The intra-ocular incision cuts across a bundle of the radial fibres of the ciliary muscle, branches of the ciliary nerves, of the third pair, and perhaps of the fifth. It will be remembered that all these nerves pass through the ciliary ganglion, and that so numerous are the ciliary nerves in the muscle that some of the older anatomists believed it to be a ganglion. A few words on the attachments of the ciliary muscle:—

The radial fibres of the ciliary muscle are attached in front to (*a*) the posterior margin of the cornea, (*b*) the inner wall of the canal of Schlemm, and to (*c*) the anterior portion of the sclerotica (Müller): posteriorly they are attached to the choroid on a line with the ora serrata, just where the choroid takes hold of the vitreous. The internal circular fibres are principally found at the anterior and inner end of the muscle, close behind the insertion of the iris. The two sets of fibres are not sharply separated; between them is a space containing both, and even amongst the more distinct inner layer of circular fibres, radial fibres are seen, or a circular is continuous with a radial fibre,—in this respect resembling somewhat the arrangement of the muscular fibres of the iris. To the circular fibres Max Langenbeck gave, in the year 1848, the name of "Musculus compressor lentis accommodatorius," indicating a function now generally attributed to them by transcendental anatomists, and investigators of the mechanism of accommodation. It must here also be noticed, as bearing upon the subject of the present inquiry, that ganglion cells have been discovered in the choroid by Schweigger.

The ciliary muscle in two cases, in which there had been repeated attacks of choroiditis, afforded a perceptible resistance to the edge of the knife, cutting in one like tendon,

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and in the other like a piece of thin wet leather. With these exceptions, no appreciable resistance, as would be expected from so soft a structure, has been experienced. I am satisfied that in the two examples referred to, I did not confound the impediment offered by the sclerotica with that from the muscle.

By intra-ocular myotomy the anterior chamber is generally penetrated; and although diagrams of the parts in the neighbourhood of the ciliary muscle do not countenance the opinion, I believe, from repeated observation, that the posterior aqueous chamber is either entered by the knife, or its outermost wall so much weakened that it ruptures, and so gains communication with the external wound. Cataract has never followed as a result of the operation. The incision should be made slowly, as in the operation for cataract extraction, and the knife retained in the wound until all spasm of the recti muscles has ceased. These precautions tend to prevent a sudden gush of aqueous, with prolapse of the iris; and hæmorrhage from diseased choroidal vessels. When the external incision is made very near to the iris the quantity of aqueous lost is very small indeed, if any. The entrance of vitreous humour into the wound should be, if possible, avoided, as it may excite irritation.

The quantity of blood lost in cases where the eye is not inflamed nor has been the subject of chronic congestion is generally limited to a few drops. In one non-inflammatory case it filled the anterior chamber. Whatever the quantity, it will readily flow out of the eye if a silver probe of the diameter of a bristle be passed backwards in the line of the incision. In the same way a prolapse of the iris is facilely reduced. I took advantage of this, and designedly displaced the pupil by intra-ocular myotomy in five cases, wherein it was eclipsed by an opacity, reducing so much of the membrane as was necessary to secure a narrow elliptical pupil with a free border. The permanent results fully equalled those of a well-performed iriddesis.

Neither a collection of blood in the eye, or a prolapse of the iris, it must be distinctly understood, are frequent accidents, even in an early experience of intraocular myotomy.

I have sometimes made the incision further back than the corneo-sclerotic union, in the true sclerotica, curving it as much as possible to a line parallel with the rim of the cornea. In this situation the muscle may be cut with great precision, and neither aqueous or blood will be discharged, provided the sclerotica is not inflamed, and the knife is not pushed beyond the limits of the muscle. The movement of the point of the knife between the sclerotic and choroid can be distinctly felt under the finger. The muscle may be cut through close to its choroid attachment, the point of the knife being directed from behind forwards.

A very efficient paracentesis of the aqueous and vitreous humour, assuming the latter to be infiltrated with serum (atrophy of the hyaloid septa), is capable of being effected by intraocular myotomy. In my first case, the wound opened from time to time as the intra-ocular pressure became great, and allowed of the escape of a straw-coloured serum, to the great relief of the pains in the eye (ciliary neurosis). After an interval the cicatrix may be penetrated a second time with safety; and the wound extended, should the circumstances of the case demand it. In a person who was extremely short-sighted, I incised the right muscle (intra-ocularly) in two places. It is advisable that an interval of not less than six weeks should intervene between two operations on the same eye.

The sensations excited by the performance of the operation are more disagreeable than painful. In one instance only have symptoms followed which demanded an energetic antiphlogistic treatment, and in that case the patient had removed the bandages, and freely exercised the eyes in a day or two after the operation. In by far the greater number no uneasiness or inflammation result. I consider the operation to be perfectly safe. In a few cases the ciliary vessels near the puncture have become congested, and the vision has been a little dim, without any effusion being perceptible in the vitreous when examined with the ophthalmoscope, and a weak artificial light.

As *After-treatment* I enjoin in all cases closure of the lids by adhesive plaster, and the application of a wet rag to the eye; aperients; and a spare diet. The unoperated eye is shaded and kept at rest. In the event of the eye feeling painful a leech is applied to the outer angle. At the expiration of four days the eye may be examined in a subdued light, when it should be again closed for three or four more days. After this period the patient wears a green shade, and abstains from reading and writing until the organ is devoid of all sense of weakness. The incautious use of the eye produces ciliary congestion in the neighbourhood of the wound, dimness of vision, and slight intolerance of light.

Physiological Effects of Intra-ocular Myotomy.—Accommodation of the Eye.—The adjustment of the near-sighted eye for near and distant objects is increased.

The effect of cutting the muscle asunder by an incision which radiates from the cornea, (Hancock's operation,) is altogether different, because, practically, the functions of the radial fibres are not interfered with. By such an operation I have cured asthenopia,—a form of "weak sight," where the patient is unable to maintain the eyes in occupation upon near and small objects, except for short periods, and regains power by resting them with looking into distance. According to Donders the eye is malformed: it may be so in some, but certainly it is not in all examples of that disorder, as the disease, when not congenital, has been cured. I once cut asunder the ciliary muscular circle in a man who was presbyopic, and who had lost his employment as a house-painter because he wore spectacles. In a fortnight after the operation he declared himself cured, put aside his spectacles, and resumed his employment. Unhappily he did not afford me opportunity of testing his adjustment. I have ascertained, by dissection, that after the muscle is cut asunder, the divided ends acquire a firm attachment to the edges of the sclerotic wound, but not to one another. Does the compressor lentis acquire an increase of power by this new attachment? If so, the *rationale* of the operation in asthenopia is clear: or is the result due to some of the causes to be hereafter named? The accommodation of the short-sighted eye is not improved by Mr. Hancock's operation, excepting the case be one of conical cornea.

In some cases of symmetrical myopia, the performance of intra-ocular myotomy upon the "worst eye" has effected a corresponding improvement in the accommodation of the other, only that the reading distance was an inch shorter, and features were not seen by one or two yards so far as by the operated eye; congestion of the choroid has also been removed. Does not incision of the ciliary muscle give promise of enabling Surgeons to regulate, without a recourse to spectacles, the focal adjustment of eyes in which the accommodation is not the same?

The accommodation to objects between the nearest and furthest points of distinct vision is not in any degree interrupted, and for distinguishing human features is made equal to that of a person whose adjustment is normal, namely, twenty-five or thirty yards.

A temporary and slight convergent strabismus, with trifling intolerance of light, followed the operation in two instances, and spontaneously subsided. These symptoms appeared to have been referrable to over-exercise of the eyes before they had recovered from the operation.

The perusal of the cases of myopia which appear with this paper will furnish some other points, which it is not necessary to refer to in this place.

I proceed to offer a few remarks on the effect of the operation on the internal circulation and the secretions of the eye. The subjective appearance of light (*photopsy*) commonly subsides on the evening of the operation, and does not reappear. I have witnessed this result in cases of choroido-retinal congestion of four years' duration; in acute choroiditis; and in that form of amblyopia which occurs in congenital asthenopics from the early and continued use of very deep convex glasses.

The circulation in the choroid being regulated, we shall be prepared to find that the stony hardness of the globe in glaucoma, and the extreme tension in cases of acute choroido-iritis, subacute syphilitic iritis, with *recent* pupillary occlusion, hydrophthalmia with the ciliary neurosis which attends these disorders, are either cured or much relieved. Having ascertained these to be facts, and that an improvement takes place in the size and tension of atrophied eyeballs after they have been submitted to enocular myotomy, I am led to the conclusion that the secretory functions of the eye assume a more healthy action, or to speak more comprehensively, the nutrition is improved.

Moreover, conical cornea, which is a disease that is not permanently improved by paracentesis, derives considerable

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benefit from incision of the ciliary muscle. The sides of the cone become more flat, and the vision of the patient has been permanently improved in all cases (eight eyes) in which I have operated, and opacities when present have also been rapidly absorbed. These results appear to point to an improved nutrition in the cornea, and to a diminution of the secretion of aqueous humour, which it will be remembered is furnished by the iris and tips of the ciliary processes—parts which are immediately implicated in the operation (a).

Intra-ocular myotomy exerts a marked influence upon the circulation of the choroid, quite irrespective of any loss of aqueous or vitreous humour which may attend its performance; also in diseases where the globe is of normal tension, and devoid of those signs which are attributed erroneously, as, I think, to spasm or constriction of the ciliary muscle, such as conicity of the cornea, "a circular depression at the point corresponding to the ciliary muscle," and bulging of the sclerotica (staphyloma).

If I can succeed by the relation of cases in establishing this proposition, it will follow that the operation must influence the condition of the vitreous and lens which depend upon the choroid for their nutrition, and which suffer in so marked a manner in glaucoma and choroiditis.

The existence of ganglion-cells in the choroid, and the arrangement of its vessels, indicate its importance in the nutrition of the eye. Is it probable that with such nervous and vascular endowments the function of the choroid is made subservient to the greater or less tension of a muscle, which, among civilised nations, equals in activity almost that of the eyelid; which, in many occupations, — watchmakers, engravers, etc., — is maintained for eight or ten hours of the day in constant contraction without rendering such employments specially liable to glaucoma, or choroiditis? Is it credible that this little, delicate, semi-transparent muscle, which is only one-eighth of an inch broad, and which is arched to the curve of the case of the eye, and so rich in nerves as to have been mistaken by the older anatomists for a ganglion,—possesses such power that it can invert, by spasm or constriction of its fibres, the curve of the tough fibrous sclerotica, "at a point corresponding to its position," and cone the cornea? According to my observations, before the arch of the sclerotica will suffer inversion or flattening so as to form a kind of neck to the cornea, its structure must be weakened, either by inflammation of the choroid when it becomes thin, or by rupture from a blow,—as, for example, where the lens has been subconjuncturally dislocated, in which case the cornea has a tendency to become conical. If it be said that it is the circular and not the radial fibres which are in a spasmodic or constricted state, then we should expect the patient would obtain more distinct vision from concave glasses, whereas, in glaucoma, we find he corrects the presbyopia which ushers in the impaired vision by wearing convex glasses. Moreover, it has never been explained how an incision in the direction of the radial fibres allays the assumed spasm or constriction of the muscle in question. Assuredly, if an organ like the thoracic diaphragm were in a state of spasm (and its division had been decided upon as practicable and proper), the Surgeon would not incise it in the direction of its fibres, but contrariwise. Nor can I admit that what is observed in spasm of the sphincter ani, and the relief of it by myotomy, bears any sort of analogy, as stated by Mr. Hancock, to his treatment of glaucoma, by the cutting asunder of the ciliary muscular circle. Before such illustration can be considered of argumentative value, it must be shown that the relation of the vessels to the direction of the fibres in the two muscles is the same. Mr. Hancock is too good an anatomist not to know that the hæmorrhoidal vessels which are compressed and congested in spasm of the sphincter ani run longitudinally in the gut, and at right angles with the muscular fibres; whereas, the radial fibres of the ciliary muscle (tensor choroideæ) and their vessels run parallel, or nearly so, and consequently the latter are not constricted by the former.

(To be continued.)

(a) The vision in the cases of conical cornea, which I have treated, has been better where the muscle was divided enocularly than by the other method; but more cases must be observed before this point can be considered as settled.

ON

PARASITIC AFFECTIONS OF THE SKIN.

By T. McCALL ANDERSON, M.D.

Fellow of the Faculty of Physicians and Surgeons of Glasgow, &c.

No. II.

In the last paper I endeavoured to give proofs of the identity of herpes circinatus, sycosis, and herpes tonsurans, which were classed under the common denomination of Tinea tonsurans, and it is to be hoped that my readers are as thoroughly convinced, as I am myself, that the differences in the symptoms of these three affections are merely owing to the different tissues of the skin attacked, and not to differences in their nature and in the causes which give rise to them.

Having described also the general symptoms pertaining more or less to all three varieties of Tinea tonsurans, and the special characters of herpes circinatus, there remain a few details with regard to sycosis and herpes tonsurans.

Sycosis.

Sycosis contagiosa — Mentagra—Tricophytie sycosique (Hardy).

Sycosis is an affection which was well known to the ancients, although its nature was not then understood, and Gibert has translated a very interesting account, by Pliny, of the raging of this disease during the reign of Tiberius Claudius Cæsar. A Roman knight is said to have imported it from Asia, where it was very common, and to have transmitted it by contagion to his fellow-citizens. It attacked, principally, the wealthy and the noble, but females were totally exempt from it. It was treated with caustics, and the soft parts were often burnt down to the bone before the disease was finally eradicated, and the deformities, thus occasioned, are described as far more hideous than the affection itself,—the remedy was worse than the disease. It is much more frequent on the continent of Europe than in England. This I believe to be partly owing to the frequency with which men kiss one another in these countries, as in the case of the Romans of old, thus communicating the disease to their friends, but principally to the custom prevailing almost universally of going daily to the barbers to be shaved. The razor is allowed by all dermatologists to be an active agent in the production of sycosis; but there are many (those, namely, who do not believe in the parasitic nature of the disease) who suppose that this is owing to the bluntness of the instrument. I cannot, however, agree with this opinion, being firmly persuaded that the cause is to be looked for in the razor's being impregnated with the sporules of the parasite. A blunt instrument, I believe, to be capable of producing an impetigo, but never a sycosis. Most of the patients whom I have seen affected with the latter, have ascribed it to their having been shaved at the barber's. Now, it is well known that barbers have generally much sharper razors and shave much more dexterously than those who shave themselves at their own homes, which is an additional proof against the irritation of the instrument being the exciting cause of the disease.

The ordinary seat of sycosis is certainly the chin; hence the word Mentagra (*mentum*, the chin) so frequently employed to denote it, but it is very often met with also on the upper lip and hairy parts of the cheeks. As it only attacks hairy parts, it is confined to adult males, when on the above situations, but when other hairy parts are affected, as the axillæ or genital organs, females are not exempt from it. From the statistics of Devergie it seems that, of 1800 skin diseases, 21 were cases of sycosis, that is to say, on an average, every 90th case.

The disease commences exactly in the same way as herpes circinatus,—namely, by the appearance of small erythematous spots, gradually increasing circumferentially, and healing in the centre, leaving elevated rosy circles, or segments of circles, covered by furfuraceous desquamation, in which the parasite can be detected microscopically. These circles are not so readily detected by the patient, being covered by hairs, and the itching not being very intolerable, he rarely applies for relief, and hence the disease is not generally seen in this stage. At this time, however, the hairs commence to become

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affected, and can be pulled out with considerable ease. Their microscopical characters are reserved till after the description of herpes tonsurans. The irritation produced by the parasite gradually increasing, the deeper structures become involved, small indurations occur, surmounted by pustules, resembling those of acne, and this has caused some dermatologists to rank sycosis among the diseases of the sebaceous glands. The deeper cellular tissue gradually partakes in the diseased process, large tubercles, from the size of a nut up to that of a hen's egg occur, which become frequently covered with crusts, and on removing these large fleshy-looking indurations are exposed to view, which are highly characteristic of the advanced stage of the disease, resembling, as they do, enormous raspberries as regards their lobulated surface.

On these tubercles also many blackish points are often to be detected, which are found to be neither more nor less than hairs broken off on a level with the cutaneous surface. By this time many of the hairs have fallen out leaving bald spots which result sometimes in permanent alopecia. But generally the hair-follicles are not quite destroyed. Their secretion, however, is very abnormal, and the hairs which grow from them have lost their shining appearance, their colour is altered, and they have become very brittle, and break off on a level with the skin, or within a couple of lines of it. These hairs can be pulled out with the utmost ease, and have neither capsule nor root. Very often, as before stated, large segments of circles of herpes circinatus extend round the front of the neck, beneath the beard, from ear to ear, and these, when present, are also highly characteristic. I have already alluded to patches of herpes circinatus on the outside and back of the wrist, produced by rubbing the diseased chin with, and the consequent deposit of the parasite upon, these parts.

The disease sometimes, though rarely, terminates spontaneously; it is often aggravated by injudicious applications, and may last for years, when suitable treatment is not adopted.

The *Diagnosis* is very easy, and the disease cannot be mistaken when its characters are well marked. The erythematous spots and circles among the hairs, the rings of herpes circinatus on the neck, wrist, and other parts, and the raspberry-looking tubercles give unmistakeable evidence of the affection when these symptoms are present, while the alteration of the hairs, the patches of alopecia, and the discovery of the parasite with the microscope, render the picture complete. The parasite is most easily detected in the early stages of the disease, and corresponds in every respect to the tricophyton above described; but, in the advanced stages, when inflammation runs high, and suppuration has occurred, its characters are altered, or it is quite destroyed by the suppurating process. It is this alteration of the parasite which has led Gruby into the error of describing sycosis as independent of the sporules of the tricophyton, but owing to the presence of another parasite which he denominates the microsporon mentagrophyte. For the same reason, probably, it is that Hebra does not believe sycosis to be a parasitic disease at all, looking upon the parasite, when found, as merely an accessory and by no means essential element of the disease.

Impetigo has often its seat on the chin, and is more frequently mistaken for sycosis than any other affection. But in impetigo there are no circles of herpes circinatus to be seen, its seat is much more superficial, there is an absence of subcutaneous swelling and induration to the same extent as in sycosis; the hairs also adhere firmly, and pain is experienced on extracting them, while they exhibit a perfectly healthy appearance under the microscope. No parasite can be detected either in the hairs or exfoliated *débris*, and the disease is not contagious. These characters when carefully attended to, are surely sufficient to clear up the diagnosis.

Syphilitic Affections may sometimes be mistaken for Sycosis, because the tubercles of the latter often present a more or less coppery appearance, and because the upper lip and chin are seats of predilection to both affections; but the history of the case, the other characters of the eruption, the presence of other syphilitic affections on other parts of the body, and the absence of the parasite are characters of great value in arriving at the nature of the case.

The *Prognosis* is always favourable as regards life, and when properly treated it is always curable. When left to itself it rarely gets well, or, if so, it is usually at the expense of permanent loss of the hair of the affected parts. When the disease has reached an advanced stage it can always be cured much more rapidly than in the earlier erythematous period, because the parasite has, by that time, been nearly destroyed by suppuration, and because the hairs can be extracted with the utmost ease. The cure, however, in such cases, is not always so satisfactory, for, owing to many hair-follicles having been destroyed, patches of permanent alopecia may be the result. When powerful caustics have been employed, great disfigurement may be the result, as in the case of the Ancient Romans. It is satisfactory, however, to think that treatment so barbarous, is not likely to be adopted in the present day.

I come now to the last of the three varieties of Tinea tonsurans, namely.

Herpes Tonsurans.

Ringworm of the head—Porrigo scutulata (Willan), Trichosis furfuracea (Wilson), Porrigo furfurans. Teigne herpétique furfuracée (Gibert), Teigne tondante (Mahon), Tricophytie tonsurante (Hardy), Porrigine tonsurante (Alibert), Trichomyces tonsurans (Malmsten), Rhizo-phyto-alopecia (Gruby).

Herpes tonsurans is met with almost exclusively in children, although the cause of this predilection is not known. It is also almost confined to the scalp, although it may appear on other hairy parts. It generally displays itself, first, under the form of more or less rounded patches, on different parts of the head, of a scaly or pityriasis-like inflammation (although sometimes in the form of very small vesicles), and these patches, at first very small, gradually increase and invade larger surfaces. The hairs in this stage are dull, dry, twisted, and easily extracted; but, as the disease advances, they become very brittle and break on attempting to extract them; and, as this friability increases, they break off, of themselves, within a line or two of the skin. The epidermis and stumps of the hairs become now covered with a most characteristic greyish-white powder, forming, as it were, sheaths to the hairs; and this powder consists of the vegetable production. When seen in this stage, the disease cannot be mistaken, the rounded form of the patches, the hairs broken off close to the skin, and covered with the greyish-white parasitic dust, are highly characteristic. In this stage also there is slight elevation and puffiness of the skin of the affected parts, and it is marked also by little prominences, from engorgement and elevation of the orifices of the hair-follicles. In arriving at the diagnosis, Bazin places great faith in the colour of the skin of the patches which is bluish or slate-coloured in dark subjects; greyish, reddish, or yellowish in fair persons. It forms a marked contrast to the skin of the neighbouring parts of the scalp, and is one of the last symptoms to disappear.

In the more advanced stages the inflammation runs higher, pustules and yellowish crusts are formed, and the diagnosis is thus rendered more obscure. This inflammation may last an indefinite length of time, but, when left without treatment it may end spontaneously, and a perfect recovery take place, although the most usual termination is in the destruction of the parasite, the obliteration of the hair-follicles, and permanent alopecia of the affected parts. During the whole course of the disease there is more or less itching complained of, and sometimes a tingling sensation.

In examining the hairs in this affection and in sycosis they are found to be very much thickened. In the early stages the bulbs are flattened and more or less disorganised. As the disease advances the bulbs are destroyed altogether, and the ends of the hair have a very ragged appearance, resembling, on a small scale, the ends of a piece of wood which has been broken across. The longitudinal fibres of the hair are very much separated by masses of sporules embedded between them, and here and there the diameter of the hair is increased, the nodosities being due to the accumulation of the fungus at these points. The medullary portion of the hair is quite disorganised and has disappeared altogether, owing, probably, to the pressure of the abnormal production (see Figs. 2 and 3). In sycosis the disorganisation of the hair is greater than in herpes tonsurans, and in the advanced stages of both affections when inflammatory and suppurative symptoms have set in the parasite is difficult to find, being more or less altered or destroyed by the pus which is formed.

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Fig. 2.

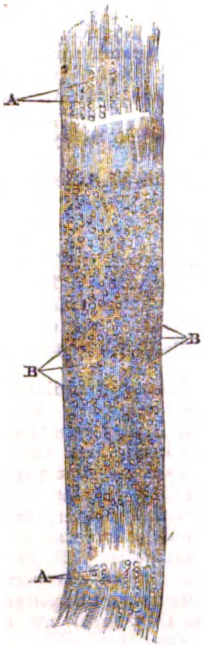

Fig. 3.

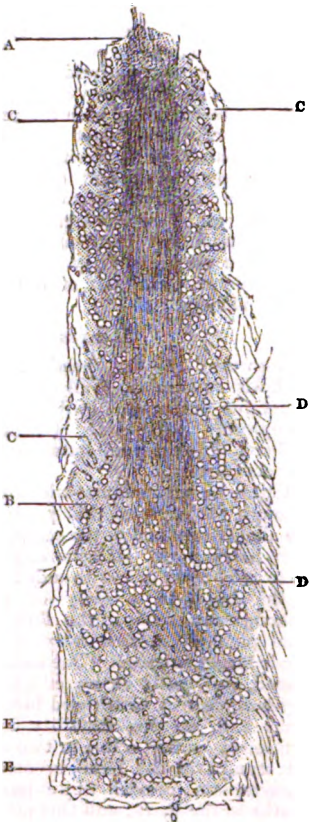

Fig. 2.—Hair from a case of Herpes tonsurans.

A A, Chains of spores between the fibres of hair; B B, Isolated spores.—(Kilchenmeister.)

Fig. 3.—Hair from a case of Sycosis of chin.

A, Rupture of superior extremity of hair; B, Rupture of inferior extremity of hair; C C C, Epidermic tunic of the hair; D D, Isolated spores; E E, Chains of spores.—(Bazin.)

The *Diagnosis* of herpes tonsurans is generally easy. In the second stage of the affection, when the hairs are broken off close to the skin, and when they are covered by the grayish-white, parasitic dust, a mistake is next to impossible. But in the earlier periods it may be mistaken for pityriasis or favus.

Pityriasis, however, generally affects the whole scalp, while herpes tonsurans is in patches having generally the circular form; in the latter also the hairs are not so adherent and frequently break on attempting to extract them, and the parasite can be detected microscopically.

The *Diagnosis from Favus* is not so important, seeing that the treatment is the same in both diseases. It resembles herpes tonsurans only in the earliest stages. The microscope is then the only resource, but the erythematous stage is generally of short duration and in the one case the formation of cup-shaped crusts, and in the other the peculiar alteration and breaking of the hair, comes in to clear up the difficulty.

In the advanced stages of herpes tonsurans, when pustules and crusts form, there is some resemblance to *impetigo*, but the hairs are not diseased in the latter affection, and the more or less circular form of the former, is a valuable aid in arriving at a correct conclusion.

The *Prognosis* of herpes tonsurans is not serious as regards life, but the disease is often difficult to cure. For the destruction of the parasite is difficult, owing to the great friability of the hairs, and the consequent difficulty of extracting them entire, the portions which are left embedded in the follicles being, so to speak, saturated with the cryptogam. When the disease is allowed to run its course without treatment, permanent alopecia of the parts may generally be expected, although there are a good many cases of spontaneous cure which must be considered as owing to some peculiarity in the constitution of the patient, so that the skin ceases to afford appropriate nourishment to the vegetable formation.

To complete the account of tinea tonsurans, the causes and treatment applicable more or less to its three varieties remain to be discussed.

Causes.—From what has already been stated it will readily be understood that I look upon the spores of the trichophyton as the essential agent in the production of all three varieties of the disease. There are many dermatologists who look upon the parasite merely in the light of a secondary formation, while others deny its existence altogether. Wilson, for instance, ascribes its origin to poorness of the blood, an opinion which is altogether untenable. In order to refute these opinions it is only necessary to recall the fact, above mentioned, that Deffis produced the disease by the simple introduction of the parasite beneath the epidermis. The spores may come into contact with the skin by transmission through the air, or they may be inoculated as above; but the most frequent modes of transmission are by the use of brushes, combs, razors, or articles of dress of persons affected with it, or by direct contact with the diseased surfaces, as in the case of persons sleeping together.

The predisposing causes must also be taken into account. Bazin finds a frequent coincidence of tinea tonsurans with syphilitic affections in his patients, and he thinks that the parasite probably germinates more readily on such a soil. There can be no doubt about the fact that the spores do not germinate equally readily on skins of all persons, although the peculiar states of the system which are favourable to its growth have not yet been thoroughly investigated. We see in the case of the eruptive fevers that all people are not equally susceptible of their contagious influences, although we cannot generally tell, *à priori*, what persons are more likely to be attacked than others. Some dermatologists are of opinion that, as in the case of fevers, the spores of the fungus germinate more readily in persons debilitated from disease or from want of good food, pure air, exercise, etc. But although this might appear probable theoretically, it is not at all confirmed clinically, for the majority of those affected are in robust health. Want of cleanliness is, however, a powerful predisposing cause, in so far as dirty persons allow the parasite to remain a long time in contact with the epidermis, whereas it might have been removed by ablutions regularly performed.

The age has also a powerful influence. Thus herpes tonsurans is a disease almost confined to children, but the reason for this has not yet been ascertained. Sycosis, on the other hand, is for manifest reasons rarely met with except in adult males, while herpes circinatus occurs at all ages and in all ranks of society.

(To be continued.)

NOTE ON THE

ALLEGED FAILURE OF WUTZER'S OPERATION FOR THE RADICAL CURE OF REDUCIBLE INGUINAL HERNIA.

By T. SPENCER WELLS, F.R.C.S.
Surgeon to the Samaritan Hospital, &c.

In the *Medical Times and Gazette* of January 12, page 36, Mr. Field, of Brighton, says that he has performed Wutzer's operation "with the usual gratifying immediate results," but he adds that he has also "met with the usual amount of subsequent disappointment." Mr. Augustin Pritchard, of Bristol, seems to have arrived at a similar conclusion, as I gather from a very able and most interesting account which he has recently published, entitled "Ten Years' Surgery in the Provinces." I believe also that Mr. Wood's operation, and other attempts which have been made in London to devise means by which the radical cure of hernia can be effected, owe their origin, more or less, to an opinion that Wutzer's operation is often unsuccessful, or that if it succeed for a time its ultimate result is unsatisfactory, the hernia re-appearing within a few weeks or months of the supposed cure.

As Wutzer's operation was made known in England by me, and as my experience of it, if not larger, certainly dates farther back than that of other British Surgeons, I think it right to express my dissent from the opinion of Mr. Field and others just alluded to, and to reiterate my own opinion

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that, in suitable cases, it is not only the simplest and safest, but also the most successful of any operation which has yet been devised for the radical cure of reducible inguinal hernia. And further, as the adverse opinion is more or less prevalent, and is founded upon cases of failure, I have made inquiry and have arrived at the conclusion that acknowledged want of success has been due to certain well-ascertained causes, which may be classed under the following heads:—

I.—The performance of the operation in cases for which it is not suitable.

II.—Imperfect performance.

III.—Want of precaution in after-treatment.

I.—In my first paper on this operation, published in the *Medico-Chirurgical Transactions* of 1854, I expressly limited the class of cases in which it is indicated to "strong, otherwise healthy persons, up to 40 or 45 years of age, who lead a life of active bodily exercise." I said we might depend upon a radical cure in such patients "when the hernia has only acquired a moderate size, has not become adherent, and when the long diameter of the inguinal canal has not been much shortened by the continued pressure of the intestine." I showed that in other cases, where a radical cure could not be depended on, patients whose hernial tumours could not be kept up by any mechanical assistance were so much benefited that the hernia might be afterwards properly kept up by a truss. In a lecture published in the *Medical Times and Gazette* in January, 1858, and in a paper published in the *Dublin Quarterly Journal of Medical Science* in May, 1858, I offered some reason for hoping that this limitation of the operation had been too strict. Mr. Jones, of Sussex, had a successful case in a man 62 years of age. I had one in a patient, aged 59, and on the other hand, Mr. Tamplin operated successfully on a child only 2 years old, and Mr. Bickersteth, of Liverpool, on a boy of 9. These cases, however, did not induce me to perform or recommend the operation on children,—for in these a well-fitted truss may be hoped to lead to a radical cure—nor as a rule to recommend it in very old people, other than as an auxiliary to the truss. In the paper in the *Dublin Journal*, after giving an account of Rothmund's experience at Munich as to relapse, I state that it "confirmed my previous impression, namely,—that in cases where the canal is not larger than to admit the finger easily, the radical cure may be relied on with almost absolute certainty, and that the probability of relapse increases with the size of the canal and rings. When the rings are very large and the canal very short, the chief use of the operation is to make a truss effective." My subsequent experience has completely confirmed the opinion that if these rules be adhered to, and the operation be performed only in cases of moderately large rings, and moderately long canal—(a ring, for instance, which does not admit more than two fingers, and a canal at least a clear inch in length)—success may be attained in a very large proportion of cases. If the ring only admit one finger and the canal be at least an inch and a-half long I think success is almost certain. I am quite aware that not one in ten cases of hernia that come before the Surgeon fulfils these conditions, and that its restricted application detracts very greatly from the value of Wutzer's operation. But it does not in the least detract from its value in suitable cases. The value is restricted, but not more so than its author represented, and the error is not his, but the error of those who have expected too much from it and have performed it in cases where a radical cure could not reasonably be expected from it.

II.—Published reports of cases, and my own observation, convince me that the operation has often been performed imperfectly. In some cases that I have seen, the cylinder had never been within the ring at all. In others, there had not been the necessary adaptation of the size of the cylinder to that of the canal. In some, no attempt had been made to produce an equable compression by the cover, which only pressed near the needle puncture, or else along one edge, making a deep indentation, or sometimes causing a slough. More than once I have seen the instrument bound tightly down by a bandage, until so much swelling of the chord and pain were produced that the cylinder had to be withdrawn. In some promising cases, harm has been done by removing the cylinder too early; and in others by leaving it too long. All these are points of practice which have an important influence on the result, and which my papers, before alluded to, explain fully.

III.—In the after treatment, the general error appears to me to have been with regard to the truss. Some Surgeons look upon the use of the truss for three or four months simply as a mask of failure; others say it is injurious, as it leads to absorption of recent exudation; both, accordingly, neglect it. I believe, on the contrary, with Wutzer and Rothmund, that it is essential to permanent success. I explained in the *Dublin Journal* that the truss must be very elastic, "with a weak spring, and large, well-stuffed pad. If the pressure be too great, or the pad too small, absorption of the plug may take place, and relapse of the hernia follow. If no truss be worn, the adhesions which are still soft and yielding might give way." I have operated with complete success on three patients who had previously been operated on by other Surgeons; one of them had never worn a truss, nor had the least precaution been taken after removal of the instrument. In another case a very strong truss, with a conical pad, which the patient had worn before the operation, was used after it. In the third case it was quite evident that the cylinder never could have been within the canal. But I must refer those interested in the subject to my Lecture and former Papers for these details.

The attempts to effect a radical cure of hernia in England have recently undergone two of the usual changes in the history of all improvements. When first made known here, Wutzer's operation was received with indifference or distrust. Then, as these feelings were overcome, a period followed of exaggerated expectation or confidence. Disappointment was the natural consequence; and a variety of new methods have since been tried, all more or less dangerous, some of them having actually led to death, and others to very serious illness. Five years ago it was difficult to convince an English Surgeon that any operation for the radical cure of hernia was justifiable in any case. Now it seems to be the fashion to experiment on every case of hernia. Either extreme is equally irrational; but the latter is by far the more dangerous. I have seen cases operated on where I am quite sure that had the Surgeon himself been the patient, he would have infinitely preferred to trust to a truss; and when there was nothing in the occupation of the patient which would lead to the conclusion that he ought to be treated upon different principles to his Surgeon. It is a sound principle of Surgery that it is wrong to perform any operation which is at all likely to endanger life merely to save the patient from inconvenience or remote danger. Now, some of the operations recently performed are really dangerous operations; they have actually been followed by death; although the number of cases is not yet very large. But not one of the Surgeons who have performed Wutzer's operation has seen any dangerous symptom, still less death, produced by it. It has been perfectly and permanently successful in the hands of many Surgeons, and must continue to sustain this character if carefully performed in suitable cases. What now remains to be done is to find some equally safe operation for those cases of wide rings and short canal for which Wutzer's operation is not suitable. This will probably be done by some simplification of Mr. Wood's operation, substituting, as he has recently done, wire for the twine he used in his earlier cases. I have made trial, 1, of Schuh's method; 2, of simply passing a wire seton through the canal; and, 3, by fixing the invaginated scrotum within the external ring by one of the large pins sold in the shops as the "safety shawl pin," passed through the plug and both pillars of the ring, and fastened over a compress of linen held in its place by the fastening of the pin. When sufficient time has elapsed to enable me to speak of the results with confidence, I hope to be able to bring them before the Profession. But I do not feel disposed to imitate those gentlemen who object to *Wutzer's* operation because relapse has occurred several months after its performance; and then bring forward cases as *successful* a few weeks only after *other* operations have been performed.

In conclusion I may allude to the curious fact that I have been consulted in cases where the operator believed that his operation had failed, because the cutaneous portion of the scrotal plug had descended to its former position, whereas I have been enabled to gratify both Surgeon and patient by the assurance that the cases were completely successful, the fascial portion of the plug completely occludiug the canal and effectually preventing any protrusion.

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REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

CONDUCTED BY
JONATHAN HUTCHINSON,
Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital.
AND BY
J. HUGHLINGS JACKSON, M.D.

CLINICAL REPORT ON EPITHELIAL CANCER.

We resume this week our Report on Epithelial Cancer, which has already extended far beyond the limits originally proposed. In proportion, however, with that, has been, it is trusted, its richness in valuable facts. The delay which has occurred in completing it has also been advantageous, since it has enabled us to obtain from the many correspondents who have courteously assisted in supplying materials the conclusions of many cases which must otherwise either have been wholly omitted or reported in an incomplete form.

Amongst the cases published this week will be a series of four supplied by Dr. Humphry, of Cambridge, illustrating that peculiar form of epithelial cancer which not unfrequently attacks cicatrices. These are of especial interest, on account of the lengthened period which has elapsed since the operation without any recurrence of the disease. That cancer, when it originates in cicatricial structures, usually manifests a very low degree of malignancy—rarely affects the glands, and rarely returns after efficient removal—is a fact which was pointed out by Mr. Cæsar Hawkins many years ago, and long before the discovery of the histological peculiarities of the epithelial form of cancer. This form is also illustrated by Mr. MacMurdo's case from St. Thomas's, and also by that at the Middlesex Hospital, in which Mr. Flower performed

TABULAR STATEMENT OF FIFTEEN CASES OF EPITHELIAL CANCER ON VARIOUS PARTS OF THE TRUNK AND LIMBS.

No.	Hospital; Surgeon.	Age and Sex.	Part; State of Health.	Glands.	Treatment.	Further Particulars.
1	St. Bartholomew's; Mr. Paget; 1852	M; 62	Back of hand. A thin man It began eighteen months before as a painful wart	....	Amputation through forearm in July, 1852	He had been accustomed to set stoves. He died of bronchitis two years and a-half after the amputation, having, however, at the time an open cancer in his axilla.
2	....	..	Back of hand	....	Amputation of several fingers and part of hand for epithelial cancer in November, 1853	Recovered.
3	Leeds; Mr. Teale ..	33	Scalp	....	Excision	Recovered.
4	London; Mr. Adams	M; 66	Upper part of ear	....	Excision	Recovered.
5	University College; Mr. Quain	F; 60	Back of hand. In good health	....	Amputation through forearm	Recovered.
6	Guy's; Mr. Birkett; 1854	M; 50	Skin of chest; five years	....	Excision. The ulcer was about an inch and a-half in diameter, and its edges painful	Recovered. It had been destroyed by caustic in 1850. Excised in February, 1851.
7	Dorset	M; 34	Behind neck; a swelling had existed seventeen years	....	Excision and recovery	It was quite superficial, and easily removed. Diagnosis doubtful. It had formed over an enlarged gland.
8	Leeds; Mr. Smith ..	M; 45	On the chest; the size of an orange	....	Excision	
9	St. Bartholomew's ..	F; 66	On the heel	....	Excision	The sore slowly healed.
10	St. Bartholomew's; Mr. Skey	M; 52	Back of hand; size of a penny; three years	....	Excision of the ulcer. Recovery	There was no history of any irritant having been applied.
11	St. Bartholomew's; Mr. Stanley	M; 57	Back of heel	....	Excision	The disease was epithelial, with some melanotic deposit intermixed.
12	King's College; Mr. Fergusson	M; 60	Back of hand; two months	....	Excision	Recovered.
13	Leeds; Mr. Teale ..	F; 42	Hand	....	Excision and removal of first and second fingers	Recovered.
14	The Norwich; Mr. Crosse	M; 65	Lobe of Ear	....	Excision	Recovered.
15	The Middlesex; Mr. Flower	F; 27	Epithelial cancer in the cicatrix of a burn. It was only of four months' duration	A large cluster, enlarged in the axilla and in the point of ulceration	Amputation at the shoulder joint	The woman was pale and cachectic. The cancer had progressed very rapidly. Two months later the cervical glands enlarged, and the wound, which had never completely healed, showed signs of reappearance of the disease. She died seven months after the operation. The burn had occurred at the age of nine.

TABULAR STATEMENT OF SEVEN CASES OF EPITHELIAL CANCER OCCURRING ON THE FOREHEAD OR TEMPLE.

No.	Hospital; Surgeon.	Age and Sex.	Part; State of Health.	Treatment.	Further Particulars.
1	Bradford; 1854	M; 65	Right lower eyelid; two years	Excision	It had attained the size of a walnut. The wound healed well.
2	Bradford; Mr. Meade ..	F; 48	Epithelial cancer of eyelid.	Excision	Recovery, last half year of 1855.
3	St. Bartholomew's; Mr. Paget	M; 56	Cancer of lower eyelid	Excision	Recovery. The man was a chimney sweep, and the disease soot-cancer.
4	Nottingham; Mr. Wright ..	M; 44	Epithelial cancer of lower eyelid	Excision	A second excision was required before the man left the Hospital.
5	St. Bartholomew's; Mr. Lawrence	M; 76	On the forehead, in the cicatrix of a previous operation	Excision	The growth was the size of an egg. A previous excision had been performed three years ago. The growth was chiefly epithelial, but at the second operation there were spots of melanosis in its structure.
6	University College; Mr. Erichsen	F; 56	Cancerous ulcer on forehead, with enlarged glands under the jaw	Both the ulcer and the glands were excised at the same time	Recovered, July, 1856.
7	Leeds; Mr. Smith	M; 64	Left temple	Excision	Recovered.

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TABULAR STATEMENT OF TWENTY CASES OF OPERATIONS FOR PRIMARY EPITHELIAL CANCER OF LIP.—(Dr. Humphry.)

No.	Sex and Age.	Seat, etc, of Disease.	Duration.	Glands affected.	Date of Operation.	Subsequent History and Remarks.
1	M; 69	Hard wart, size of a pea, right edge of upper lip	Few months	None	April, 1846	Well, February, 1848.
2	M; 48	Indurated warty growth occupying an inch of left edge of lower lip	One year	None	January, 1843	Well, January, 1854.
3	M; 59	Indurated granular ulcer of left half of upper lip, involving cheek to near orbit, left ala of nostril, and part of inside of nostril	Six months	None	October, 1845	Well, August, 1855. The disease began in a scar. Had been cauterised before he came to Hospital.
4	M; 75	Deeply cleft, indurated ulcer left side of lower lip	One year	None	January, 1845	Died of return of disease one year after operation.
5	M; 66	Deeply cleft, indurated ulcer nearly whole of the edge of lower lip	One year and a-half	None	October, 1847	No return of disease. Died of inflammation of bowels fifteen months after operation.
6	M; 80	Cleft, indurated ulcer, left half of lower lip	One year	None	February, 1848	Well, November, 1860.
7	M; 70	Large indurated ulcer on right side of lip	....	None	July, 1847	Well, July, 1850.
8	M; 66	Warty growth on hard base in right side of lower lip	Eight months	None	June, 1850	
9	M; 49	Knotty induration of right edge of lower lip	Five years	Submaxillary, adherent to jaw	July, 1850	Disease soon returned at the part. He died eighteen months after the operation. The lip, part of jaw, and the glands were removed at the operation.
10	M; 64	Cancerous warts right edge of lower lip, removed by a Surgeon	....	....	December, 1849	Disease soon appeared in glands under chin, of which he died March, 1851.
11	M; 81	Indurated ulcers on right edge of lower lip	Three years	None	August, 1851	Disease returned February, 1853, on jaw beneath the cicatrix, but not connected, with it.
12	M; 71	Indurated wart near right angle of mouth	One year	None	July, 1853	No return of disease in September, 1853, when he died in a fit.
13	M; 66	Warty growth right edge of lower lip	Two months	None	September, 1853	No return of disease; died of old age September, 1858.
14	M; 81	Indurated wart on right edge of lower lip	Three months	None	March, 1853	No return of disease; died of old age October, 1859.
15	M; 63	Hard wart in middle of lower lip	Eight months	None	July, 1853	Quite well, November, 1860.
16	M; 42	Indurated ulcer on right ala nasi and adjacent part of upper lip	Three years	None	June, 1854	No return of disease; died of cholera in 1857.
17	M; 56	Indurated wart in middle of lower lip	Nine months	None	June, 1857	Well, November, 1860.
18	M; 50	Warty	One year	One under chin enlarged	April, 1858	Well, November, 1860.
19	M; 32	Warty ulcer	One year	None	July, 1858	Well, November, 1860.
20	M; 88	Warty ulcer in lower lip	One year	None	March, 1854	Well in 1858.

TABULAR STATEMENT OF THREE CASES OF OPERATIONS FOR RECURRED EPITHELIAL CANCER OF THE LIP.—(Dr. Humphry.)

No.	Sex and Age.	Seat of Disease.	Duration.	Glands Affected.	Date of First Operation.	Date of Second Operation.	Subsequent History and Remarks.
1	M; 36	Circular ulcer, size of a shilling; indurated base; right side of lower lip	Four months	None.	Sept. 12, 1846	Nov. 20, 1846	The disease returned in the whole length of the cicatrix. The first operation by semi-lunar incision; the second by V-shaped. Well, Nov., 1853.
2	M; 88	Indurated ulcer on left edge of lip	Eighteen months	None.	February, 1844	Sept. 1844	Disease returned after first operation as soon as the wound was healed, and it proceeded rapidly.
3	M; 61	Indurated wart size of bean, right edge of lower lip	Four years	None.	July, 1850	March, 1855	Warty growth size of pea on edge of the cicatrix of six months' duration. Well, Nov. 1860.

amputation at the shoulder-joint (See Case 15 in the first table).

For the valuable series of cases of cancer of the lip given in the third and fourth tables, we are indebted also to Dr. Humphry. These cases are, with a few exceptions, additional to those given previously, and their value is greatly increased by the fact that they constitute a complete record of the experience of an individual Surgeon in regard to this disease, and yet more by the circumstance that Dr. Humphry has zealously followed up his patients, and ascertained their condition at considerable periods after the operation.

In the first table we have some particulars respecting fifteen cases in which epithelial cancers were removed by operation from various parts of the trunk and limbs. The second tabular statement contains five cases of the same disease occurring on the forehead, temple, or eyelids. These two tables include all the examples of epithelial cancer in the localities mentioned which have been recorded from time to time in our Statistical Reports of Operations, and they therefore afford some criterion of the comparative rarity of the disease in these situations. J. H.

ST. THOMAS'S HOSPITAL.

CANCER IN A CICATRIX LEFT BY LUPUS.

(Under the care of Mr. MACMURDO.)

William H., a thin, pale man, aged 50, a carpenter, was admitted under Mr. Macmurdo's care in July, 1855. On the side of his face was a large cicatrix, which had been left after ulcerated lupus. The scar extended from his ear to the angle of his mouth, and downwards to the level of the jaw. On the centre of this scar a warty, cauliflower-like growth had commenced about two years ago, and had increased rather rapidly during the last six months. The new growth had an overhanging border, and its structure was rather soft to the touch. It bled very readily when touched, and of late there had been a good deal of darting pain in the part. The man was not aware of any family predisposition to cancer. Although thin and pale, he did not think that he had materially lost flesh since the disease had shown itself.

Some portions of the growth were cut off for microscopic examination. Their structure showed numerous epithelial

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cells in various stages of growth, together with some of the compound or nested cells.

No operation was performed, and the man was shortly afterwards lost sight of. There had been no enlargement of the glands up to the time of his discharge.

It will be seen that, in this case, there were some features different from what is usual in epithelial cancer. Thus, there was a fungating growth instead of an ulcer with warty edges, and although it had lasted a considerable period, no glands had as yet enlarged. In microscopic elements, however, the structure was not distinguishable from the ordinary form of epithelial cancer.

THE "DREADNOUGHT" SEAMEN'S HOSPITAL.

CANCER OF THE TESTICLE—EXCISION—DEATH FROM CANCER IN LUMBAR GLANDS ETC. FIVE YEARS AFTERWARDS.

(Under the care of Dr. STEPHEN WARD.)

The following case is of value, as presenting us with a complete history of the progress of a disease, of which but too frequently we see only fragments. Patients, whose testes are removed for cancer, usually leave the Hospital well within a short period of the operation, and are thenceforward lost sight of. The Surgeon is, therefore, left to form his own conjecture according to his theories of the nature of medullary cancer, as to whether any real advantage was or was not obtained by the operation. Clinical records on this matter are of real value.

E. P., aged 34, a native of the the Isle of France, was admitted into the *Dreadnought* Seamen's Hospital, under the care of Dr. Ward, on December 31, 1858. Five years ago, when in Melbourne, he had his left testicle removed for malignant tumour. He remained well, after the operation, until two years ago, when he was attacked with dysentery at Calcutta, and was laid up for five weeks. He recovered; but about a year subsequently he had another slighter attack of dysentery. From this he also quite recovered, and continued in good health up to five months back, when, in coming round Cape Horn, he got very wet, and was seized with vomiting and pain in his left side. This lasted up to two months ago, when he landed at Dunkirk, and went into the Hospital there. He remained there sixteen days, but not getting any relief, he came on to London, and was brought to the *Dreadnought*.

The prominent symptoms at the time of, and for some time after, his admission, were:—A sense of great uneasiness and fulness in the abdomen; pain, referred especially to the back and left lumbar region; constant nausea, and frequent protracted attacks of vomiting; constipated bowels; a weak, rapid pulse; characteristic anæmia; emaciation; and prostration of power, and a pinched, sharp, anxious expression of countenance. On examination, there was marked tenderness over the left lumbar region, with apparent enlargement of spleen and left kidney, some extension of liver beyond its normal limits, and a general deficiency of resonance on percussion, and doughy feeling of the entire abdomen. The previous history left no doubt as to the malignant nature of the disease, and the treatment, consequently, was directed merely to the relief of suffering by means of anodynes, and to varying the diet so as to suit his irritable condition of stomach. He lingered on to March 3, 1859, when he died quite exhausted. He had retained his mental faculties to the last, exhibiting a remarkably anæmic condition, and having, on two or three occasions, nearly gone off in fatal syncope, from attempting to sit up in bed.

Inspection.—The small intestines and lumbar glands—the latter being greatly enlarged—were matted together by adhesions, and formed a large, semi-solid tumour. The left kidney was at least three times its normal size, and the medullary portion was completely converted into a mass of cancer. The liver was studded with tumours or rather cysts of medullary cancer; the milky fluid from which exhibited under the microscope nucleated cells and oil-globules. The liver weighed nearly six pounds. Right testicle and other viscera healthy.

ADDENBROOKE'S HOSPITAL, CAMBRIDGE.

FOUR CASES OF EPITHELIAL CANCER OCCURRING IN CICATRICES.

(Under the care of Dr. HUMPHRY.)

Case 1.—Epithelial Cancer in a Scar of Sixteen Years' Duration—Treatment by Chloride of Zinc—Recovery—No Return of the Disease Six Years afterwards.—John F., aged 38. November, 1853. Raised, warty ulcer, two inches by one and a-half, on the skin adherent to tibia; it commenced eight months ago on a scar resulting from a contused wound sixteen years previously. Chloride of zinc freely applied, and again on December 9. The rough surface of the tibia was exposed when the slough separated. It granulated, and the wound was quite healed in June, 1854. It remained sound in January, 1855. No return of the disease, December, 1860.

Case 2.—Epithelial Cancer in a Cicatrix of Sixteen Years' Duration—Disease of Femur—Amputation at the Hip-joint—Recovery—No Return of the Disease Five Years afterwards.—Richard F., aged 27. June, 1855. Sixteen years previously had severe wound of soft parts of the thigh from a thrashing-machine. In 1854 he chafed the cicatrix. The ulcer so caused spread quickly and assumed a cancerous character, with everted edge and coarsely-granular surface. It extended into the thigh-bone, which gave way on June 25, causing agonising pain. The disease was high, and amputation at the hip-joint was at once performed. Portions of the growth taken from different parts presented large, flat scales, and the other appearances usual to epithelial cancer. The disease extended up and down the cancellous texture of the femur for some distance. There was no disease of the inguinal glands. The patient recovered and remains well.

Case 3.—Epithelial Cancer in a Cicatrix of Twenty Years' Duration—Amputation in Thigh—Recovery—No Return of the Disease.—Richard R., aged 43. May, 1855. Epithelial ulcer on inner side of the thigh, just above condyle, extending down to the bone. Thickening of femur, some enlargement, but no hardening, of inguinal glands. The pus discharged from the sore contained scales like those of tesselated epithelium. Injured the part by a fall twenty years previously. A gathering formed, burst, and healed in a year. Five years afterwards a second gathering formed and burst, and some pieces of bone were discharged. The part healed, but burst again after seven years, and did not again heal. In the last two years the ulcer had gradually increased in size. Limb amputated in upper third. The patient recovered. He died of pulmonary apoplexy in November, 1857. There was no return of the disease.

Case 4.—Epithelial Cancer in an old Cicatrix at the Elbow—Excised—Wound closed by Flap of Skin from Abdomen—Recovery.—A man, aged 46. May, 1856. Ulcerated warty growth, six inches by four, at the elbow. It commenced four years previously upon the cicatrix of a burn which had occurred in childhood. It was adherent to the olecranon. Had been treated with caustics without success. The whole mass was excised, together with a portion of the olecranon, and the gap was filled up by a flap of skin reflected from the side of the abdomen. The arm was bandaged to the side, and the connexion of the flap with the abdominal wall was not severed for nearly a month. The flap united to the elbow, the wound quite healed, and there was no return of the disease eighteen months afterwards.

THE LONDON HOSPITAL.

REPEATED ATTACKS OF CONSTIPATION—DEATH—CANCER OF THE CÆCUM AND PERFORATION OF THE INTESTINE.

(Under the care of Dr. DAVIES.)

[From Notes by Mr. GWYNNE.]

John P., a thin, sallow, emaciated man, aged 35, was admitted under the care of Dr. Davies, August 29, 1860. Except for slight bilious attacks he considered himself to have had good health, until three months before his admission. Then he suffered severely from an attack of flatulence and constipation. Under treatment he recovered from this, but had a second

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attack, supposed to have been occasioned by an error in diet, of the same symptoms shortly before his admission into the Hospital.

He was much emaciated, sallow, and anæmic, and suffered severely from pain in the abdomen, which was distended and tympanitic. There was no tenderness on pressure. The heart and lungs were healthy. The urine was pale and copious.

On the 28th, the day of his admission, his bowels were moved, and the motion appeared to be natural. The pain in his abdomen steadily increased. It was slightly relieved for a time by purgatives and enemata.

On September 3rd he had, for the first time in the Hospital, stercoraceous vomiting; but he then stated that six weeks before he had vomited similar matter. The pain was still very violent, but was much relieved by enemata. The bowels never acted spontaneously.

On the 10th, at Dr. Davies's request, Mr. Hutchinson saw the patient. He examined the rectum, but did not find any stricture. A long elastic tube was then introduced about two feet into the colon, through which a little fluid fæces and a large quantity of flatus passed. The tube was kept in a few hours and then withdrawn. In the evening he passed a copious fluid motion. The abdomen was ordered to be bandaged, but he could not bear it to be done at all tightly.

On the 11th he was much better, and his bowels were freely opened. He continued to have less pain, and with gentle aperients his bowels were kept tolerably open until September 25, when he again had intense pain, constipation, and stercoraceous vomiting. From this date he grew gradually worse and became very much emaciated.

He died on the 30th.

Post-mortem.—The peritoneum contained about a pint and a-half of serum, with flaky, granular lymph diffused through it. The intestines were distended, thickened, and soft, and at depending parts covered with lymph. No twist observable. At one point of the small intestine, the peritoneal coat had given way for an inch and a-half. The commencement of the cæcum contained a hard, cancerous mass involving the whole of its circumference. The mesenteric glands formed a chain running from the cæcum and were hard and enlarged. The stomach contained fæcal matters, and also all the small intestines, but the colon solid fæces. On opening the cæcum it was found occupied by a cancerous growth, narrowing the cavity so as only to admit the tip of the finger. The belt of cancer was broadest at the unattached portion of the gut. It was there about an inch and a-half long, diminishing till it reached the attached portion, where it was a quarter of an inch long.

UNIVERSITY COLLEGE HOSPITAL.

ELEPHANTIASIS OF THE FOOT AND ANKLE—AMPUTATION.

(Under the care of Mr. THOMPSON.)

On Wednesday week, at University College Hospital, Mr. Henry Thompson removed the foot and lower two-thirds of the leg in a case of elephantiasis. The patient was a woman, aged 42. The foot was much enlarged, and the subcutaneous tissues hard and brawny for the lower two-thirds of the leg. There was in this case, Mr. Thompson remarked, as is often found, a curious connexion with India, where the disease is endemic. The woman's husband was a soldier; she was married to him twenty years ago. After living with him three months, he went to India, and after a time he was sent home invalided. He lived with her fifteen months, and then died. She remained well six years after his death, when, four years ago, she began to suffer from the elephantiasis. Mr. Thompson said that many Indian Surgeons attributed certain forms of elephantiasis to syphilis: and in this case there was the possibility that the husband might have contracted syphilis in India, and subsequently have infected his wife. There was, however, no history of syphilis obtained from her. She had never been pregnant. Mr. Thompson added, that he did not amputate because the disease was elephantiasis, but on account of the extreme pain which the patient had suffered. The pain came on in definite attacks of what she called Erysipelas. For attacks of this kind the woman had, during the last few years, been in a ward of the Marylebone Infirmary, under Mr. Thompson's observation, on twenty-two different occasions. There was also a large ulcer on the outer part of the leg in a most unhealthy condition.

The condition of the leg in this case was not nearly so advanced in the elephantoid changes as is that of the patient brought before the Medico-Chirurgical Society, by Dr. Thomas Richardson, a few weeks ago. In Dr. Richardson's patient (a girl, aged 20) the rugged, tuberculated condition of the skin is most remarkable, while in Mr. Thompson's the changes consisted rather in induration of the cellular tissue, the skin itself being almost smooth, and but little tuberculated. It is in these cases of smooth elephantiasis that the Indian Surgeons have observed the phenomenon of periodic attacks of pain. In Dr. Richardson's case no attacks of pain have occurred, the disease having been slowly and steadily progressive. In the latter case, as may be remembered by those who read our report of the meeting at which it was brought forward, the father of the patient had, prior to her birth, lived for many years in Barbadoes. The girl is now in the London Hospital, and can be seen by any one who is interested in observing the features of a remarkably good example of this (in England) rare disease.

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Medical Times and Gazette.

SATURDAY, JANUARY 19.

"ONLY A DOCTOR."

MR. THACKERAY has given the verdict of the public on the question so vigorously discussed of late in the Medical journals, viz. "Who is a Doctor?" through old Major Pendennis, who acts as foreman of the jury, in the new story "Adventures of Philip on his Way through the World." The characters in the first chapters of the tale, are almost exclusively Medical. We have Dr. Firmin, the father of Philip, representing the fashionable Physician; plain Mr. Goodenough, is a London Surgeon-Apothecary; and there are the widow and son of a country Surgeon. The opinions expressed by the great novelist as to the social position of the Medical Profession are not without interest. The fashionable old Major is made to remark, "I dine at Firmin's house, who has married into a good family, though he is only a Doctor, and—" "Only a Doctor, indeed!" calls out Goodenough, "My dear creature" (to Mrs. Pendennis, the Surgeon's widow), "I have a great mind to give him the scarlet fever this minute!" and then there is a little volley of protests from Mrs. Pendennis, to all which the Major replies with—"Stuff! nonsense—no patience with these personalities, begad! Firmin is a Doctor, certainly—so are you—so are others. But Firmin is a University man, and a gentleman. Firmin has travelled, Firmin is intimate with some of the best people in England, and has married into one of the first families. Gad, sir, do you suppose," etc.

A *Saturday Reviewer*, in a notice of Mr. Jeaffreson's "Book about Doctors," writes much in the same strain, when discussing the social position of the Medical Profession. He hardly thinks the proposal to make "Sir Ephraim, the

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eminent Surgeon," a Peer of the realm, would give the Profession generally the required elevation. There is nothing dignified, he argues, about the *personal* services which the Medical Practitioner renders in the hour of pain and sickness. They are very useful, very necessary if you like; but at the best are not pleasant to people, and are dispensed with as soon as possible. When dispensed with, there is an end of the Doctor and his help. Perhaps it would have been well to have added,—Qualms arise as to "the little bill" he has to send in, and schemes are too often invented to avoid the payment.

All our readers will, we think, agree with Major Pendennis in asking, "If a man of one of the most ancient families in the kingdom,—in the empire, begad!—hasn't a right to pursoo a learned, a useful, an honourable profession?" but how many of them can look around amongst a hundred of their colleagues, and select two such high-bred Doctors? Fashionable parents undoubtedly eschew Physic as a profession for their sons; nay, fashionable Physicians or Surgeons rarely educate a son to their own Profession. The Army and Navy, the Law and Clergy lists bear witness to the curious fact, that the very men who owe their own rank and wealth to the practice of the healing art, prefer to educate their sons for the Church, the Bar, or the Military Service, afloat or ashore. It was the *res angustæ domi* consequent on the early death of his father, a Professor of Anatomy and Surgery to the Royal College of Surgeons of Dublin, which forced the late Dr. R. B. Todd into the ranks of the Medical Profession; otherwise he would have been called to the Bar, and was, in fact, keeping the terms required to that end at the time of his father's death.

Now, nothing is more certain than that the emoluments of a profession (distinguishing it from the audacious charlatanism which enables pestiferous Quacks to drive dashing chariots in the Park) go *pari passu* with the position it holds in the public mind. Gilbert Blane did a greater service in the defence of his country than even Wellington or Nelson, for he supplied that without which no battle can be fought, much less won, and with which a hundred Wellingtons or Nelsons would be ready to lead their countrymen to victory.

> "A wise Physician, skill'd our wounds to heal,
> Is more than armies to the country's weal."

But the Crown would have conferred a dukedom on a successful painter rather than upon Blane. So a baronetcy was a stretch of courtesy. That the mere exercise of the art of healing will never secure for its professors the social position desiderated, is, we may assert, established without contradiction. Even baronetcies are granted to distinguished members of the Profession, not because they are skilful or learned, but because, being such, they have gained the confidence of the aristocracy and the Court; and it befits the dignity of the latter that a title shall be held by those who minister to them professionally. It was because he is a scientific and skilful Surgeon that the distinguished President of the Royal Society was made Surgeon to the Monarch; and being *that*, he was made a Baronet.

What, then, is needed to secure the Medical Profession that social position to which it is fairly entitled? First, there should be honourable positions in the State attainable by the members, and then men of rank and fortune will be induced to educate their sons for the Profession with a view to the attainment of these positions. In this way it would at once be more closely linked through its members with the wealthy and titled classes, who would then feel it a personal matter to assert its dignity. A man brought up to the other Professions has a chance, at least, of finding his way to the House of Lords, either as a Bishop, or Lord Chancellor, or Law Lord, or a successful General; and this it is which attracts to those Professions in preference to Physic. Now, that such honourable positions might be found for the higher members of the Medical Profession is certain. The President of the Medical Council, for example, is a more dignified person, *qua* his Profession, than a Bishop, *qua* his, and might be appointed for life with a seat in the House of Lords. To this end, however, public opinion must be influenced in the right way.

It is certain, nevertheless, that so long as the Profession is undignified in its members, and even the best of them seek rather the small honours which the Medical Colleges afford at the outlay of a few pounds than those which an enlightened public opinion would confer, there is small hope for it. No shams ever did, or ever will, influence society permanently. About a thousand Practitioners of the art of Medicine have obtained the licence of the Edinburgh College of Physicians on the recommendation of two of their brethren, and on the payment of £10. Our pages have groaned with letters as to whether these gentlemen should be styled "Doctors," or "Physicians," or what. They are, in truth, just what they were before. They have a permission to practise the art of Medicine. The possession of the parchment has added nothing to their skill, their learning, or their dignity. In like manner, numerous Graduates of British Universities have become Licentiates, or Fellows of the London College of Physicians. They have paid their money and got their parchment,—but are they the wiser or more skilful? Not a wit. It may be argued that in all these cases the individual has been raised to the rank to which he is entitled. What, then, is meant by rank? A Physician is not a *mere* practitioner of the Medical art—he is, or ought to be, what the name implies—*Physicien*—a physical philosopher who applies science to Medicine. Are the thousand graduates all philosophers? So also with the title of Doctor. It is an academic title specially marking, as Major Pendennis says, "a University man and a gentleman." If in assuming the title of Doctor *this* rank be assumed by every one of the thousand Practitioners, and they have no right to it, legally or morally, then a blow is struck at the dignity and emoluments of the Profession, which will certainly re-act on the assumers of a false position, and the public will still say, with more and more propriety, both as to social *status* and fees, "only a Doctor!"

The *Saturday Reviewer* is right, too, in his doctrine, that science and learning can alone give dignity to the Medical Profession; without these the greatest skill and the most successful career as a fashionable Physician or Surgeon will avail nothing, however Medical or other titles may be multiplied. On the other hand, the universal multiplication of pretentious titles will inevitably give an air of charlatanism to the Profession generally which it ill deserves, until at last they will be repudiated altogether, and plain "Mr." be considered the most honourable designation.

THE WEEK.

The newspapers are filled with complaints of the severity of the weather, and the want of adaptation of our houses and manners to our wants. We persist in burning our coals in fire-places which send up large volumes of wasted carbon to pollute the atmosphere; hence, a sudden stagnation or cooling of the air, with change of wind, sends it back to us, turning day into night, and filling our eyes and lungs with vapour of sulphate of ammonia, mingled with the exhalations of the Essex marshes. The ironwork of railways loses its fibrous texture and becomes crystalline, from the incessant vibration it is subjected to, and, under the influence of frost, becomes brittle as glass. The water supply to our houses is cut off by the slightest frost, and all sorts of mephitic vapours are exhaled in the houses of the poor from their choked sinks and water-closets. Whilst every current of cold air is prevented from entering by doors and windows,

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the bedroom chimneys are too often made the channels of air-supply, and fruitless complaints made of back smoke. Meanwhile the recommendations of the late Commission on Warming and Ventilating Houses are dormant, for want of practical demonstration. Who will build a model dwelling?

Death from injuries inflicted by a lion are not so common in this country but that we may notice the case of a poor fellow who was killed at Astley's Theatre, on Monday, the 7th inst. Certainly the brute did his work effectually. From the evidence of the Surgeon, there were thirty-five distinct wounds about the head and neck, and forty-five about the right thigh and groin. There were several wounds on the scalp and face, denuding the bone, and a patch of extravasated blood, four inches in diameter, under the dura mater; one of the animal's teeth had penetrated the spinal cord, smashing the body and transverse process of the fifth cervical vertebra. It was the Surgeon's opinion that the animal had seized the man from behind, striking right and left on the head with his paws, and biting him on the neck; thus producing concussion of the brain and immediate death. The wounds in the groin were caused by the animal picking him up. It is satisfactory to believe that death was painless and instantaneous, and to know that the countenance exhibited the greatest calmness and composure. This reminds us of Dr. Livingstone's account of his mental sensations whilst in imminent danger from a lion's jaws.

The excessive wetness of the last year will have one good effect. It will cause measures to be taken for the permanent improvement of the outfalls. Many a venerable water-mill, which has existed since the time of Domesday Book, ought to be swept away, in order to lower the water-level of the district above it, and to convert what is now poisonous marsh into healthy meadow. The loss of crops and of live stock in low-lying lands and farms has been very great within the last few months. Towns, too, as well as country, want land drainage. The conveyance away of house-sewage is not sufficient. We know of a case lately in which as much money was spent in concreting, to keep the wet from the foundations of a single house, as would have drained the whole district,—in which district—one of the most fashionable in London—several cases of ague occurred during the last year. Why, by-the-bye, do engineers persist in speaking of *arterial* drainage? The word is misapplied, and the system best adapted for the conveyance of water to a place may not be best adapted for its removal.

A case (Gray *v.* Robinson) was tried in the County Court, Liverpool, on the 10th inst., before J. K. Blair, Esq., Judge, which is of some importance. It was an action to recover £15 for professional attendance on the Defendant's wife and family. The Plantiff, who is registered, practised as a Physician in Liverpool: and the defence put forward was, that, as such, he could not recover Medical fees in a Court of Law. His Honour, however, ruled that the New Medical Act did so enable the Plaintiff, and therefore a verdict was given in his favour, less 10s. 6d., which he agreed to deduct from the amount claimed. This decision becomes of more importance, seeing that Dr. Gray holds no English qualification; at least, the Medical Register only states that he is an M.D. of Glasgow, and L.R.C.S. of Edinburgh.

Most of our readers remember Guthrie, in Portugal, at the head of a detachment, showing his men how to put their backs to their waggons and defend themselves against French cavalry. Many other members of our Profession have shown great military capabilities on an emergency, and amongst them Dr. Campbell, resident in the tea district of Darjeeling, who has been carrying on war with a very inadequate force against a neighbouring freebooter, the Rajah of Sikkim. The Doctor marched at the head of his force, handled his men carefully, saved them when in difficulties, and though he lost a gun, lost no honour, and added 500 square miles to British territory. Of course, as he is "only a Doctor" he will see others rewarded for his work.

On enquiring the other day at a leading mineralogist's for specimens of flint instruments from *the drift*, the reply was, "No, we have none; but there is a man just come up from Yorkshire who will supply any quantity. He is a very expert fellow, and makes them to order, modern or antique, according to the taste of the buyer."

Among our columns of General Correspondence our readers may find a report of a case in which a highly respectable Physician has been most unjustly blamed by a Coroner's jury. The important questions at issue are stated with admirable precision by Dr. Christison. Dr. Watson probably will hardly think it worth while to move the Court of Queen's Bench for another inquest, but we trust that this and other cases may be used in the ensuing Session of Parliament to bring about the very necessary reforms of the Coroners' Court. The whole system is so utterly rotten that it must collapse before very long.

The death of Dr. Noble, one of the Members for Leicester, leaves the Medical Profession again with only one representative in Parliament. He died suddenly at Malaga, in his sixty-second year. It is to be hoped that those members of our Profession who have arrived at an independent position, and have earned the confidence of their Professional brethren, will not continue to maintain a position of indifference with regard to Parliamentary honours.

Mr. Holmes has been elected to the Secretaryship of St. George's Hospital. Some opposition was raised against him on the part of some of the Governors, on the plea that he was allied with a close Medical clique, who have it all their own way in the government of the Institution. Nevertheless, many of our Medical friends, who are no members of any such clique, gave Mr. Holmes their support, on the ground of his long services and general fitness for the appointment.

The brig *Mignonette* arrived at Plymouth on Sunday from Surinam. Three men had died during the voyage, and five others were seriously ill with the fever and ague of Surinam, leaving only three men and a boy to navigate the ship and take care of the sick. The malady broke out before they left the harbour; but as seven men sent ashore from a Dutch merchant ship had all died in the Hospital, they determined, wisely, to go to sea, to try the effect of fresh air.

The effect of the season in Scotland is thus described by the Registrar-General for Scotland:—

"The descent of temperature has exhibited its usual effects in enormously increasing the fatality of inflammatory affections of the respiratory organs. The deaths from that class of diseases (excluding consumption, hooping-cough, and croup) numbered 214 during October, 298 during November, but rose to 427 during December, and thus constituted 16·3 per cent. of the total mortality. The deaths from consumption

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do not increase from the same cause in anything like such a ratio, and only numbered 264 in the eight towns during the month."

The sale of unwholesome meat in London must be very large if the Devonport butchers are to be looked upon as a fair sample of the sources from whence the London markets are supplied. Dr. Bishop, of Devonport, has published in a local paper the following statement:—

"A butcher of this town has indulged in this infamous traffic. He has recently boasted of having despatched by rail to London sixty or eighty carcases of sheep in one week; that he received a cheque for the lot at *twopence per pound*, and that 'it paid him *devilish* well at that.' This statement was communicated to me by one of the most respectable butchers in Devonport Market, and corroborated by two others of equal integrity, who thought the matter ought to be exposed."

The members of the French Academy of Science have hitherto received an *honorarium* of £64 per annum from the Government, but the Emperor has just issued a decree by which this stipend is raised to £240 per annum. This is received by some as a proof of munificent encouragement of science; while others only look upon it as the transformation of a quiet hall of science into a political arena. All, however, will be interested in knowing that, as the Academy contains sixty-three sectional, ten free, and eight foreign members, upwards of £21,000 will be paid annually to seventy-three French men of science. Whether Brewster, Faraday, Herschel, and Owen, who are four of the eight foreign members, will also have the same pension does not appear in the announcement.

There was an animated debate at the Medical Society of London on Monday, respecting a resolution from the Council in favour of the publication of monthly Transactions of the Society during the sittings of each session. The result was, that the resolution was carried. There is some difference of opinion as to the wisdom of this step. Any really good paper could always appear immediately in the weekly journals, and would have a far wider influence than when the perusal was confined to the members of the Society only: while anything not really good, had better remain unembalmed by the ink of the printer. Many also would prefer a handsome annual volume of Transactions, like those of the Medico-Chirurgical, Pathological, and Obstetrical Societies. But some ardent spirits feel confident that the "new move" will add largely to the number of members of the Society.

REVIEWS.

The Medical Critic and Psychological Journal. Edited by Forbes Winslow, M.D., D.C.L. Oxon. No. I. January, 1861.

A note from the publisher calls attention to the fact that this Journal is "no longer to be exclusively psychological in its character; but that subjects of general interest to the Medical Profession, as well as to the public, are to be discussed in its pages." We can only say that we should be exceedingly sorry if "the public" were to take this as a sample of a journal adapted for the Medical Profession. We must confess that the introductory article fills us with astonishment. First come half-a-dozen pages on tobacco; two of which are a reprint in close type of "a most able article" from a penny newspaper. At the beginning the Medical Critic and Psychological Journalist tells us that "the offensiveness of the habit is a question of æsthetics, not of ethics," and at the end, that "the weakest point of tobacco-smoking is its ethical, not sanitary aspect." Then we have a set of cuttings from the newspaper reports of the Social Science Congress at Glasgow, including an "instructive" leading article from the *Times*. We are told, by the way, that the annual gathering of this Congress has now become an established and the most notable event of the *terennial* (!) quarter of the year." To this follow seven or eight more dreary pages, consisting of "admirably conceived" articles from the leading journal, on book-hawking, labourers' cottages, and the plea of lunacy. On this last topic the *Medical Critic* surpasses himself.

The *Times* calls a homicidal intent "something abnormal, and hardly consistent with a sound state of mind." Listen to the *Critic*:—

"When a writer speaks of 'an homicidal intent being in itself something abnormal and hardly consistent with a sound state of mind,' one is rather alarmed at the laxity of phraseology. 'Man is born unto sin, as the sparks fly upwards' is the dictum of sacred writers on the normal state of man; consequently to use the term abnormal in reference to a purely sinful act, is not even warranted by ethics, much less pathology."

This from a writer who professes to be alarmed at "laxity of phraseology"! Is it possible to find a worse specimen of concentrated carelessness and confusion? First. The quotation is false. It should be "Man is born unto trouble,"—not a word of sin. Secondly. It is not a "dictum of any sacred writers," but an observation made in dialogue by one of Job's friends, who are afterwards convicted of "darkening counsel by words without knowledge." Thirdly. To deny that a sinful act is abnormal is contradictory in terms, and immoral in its tendencies. Fourthly. To use a misquotation from the Bible, and call it "ethics," on the part of one who is alarmed at laxity of phraseology (!) needs no reprehension on our part.

There are some articles in the Journal, such as that on "Syllogism," by Dr. Latham, and one on "General Paralysis," translated from the *Annales d'Hygiène Publique*, which are worthy of a better place; but when we consider that the announcement of the *Medical Critic* modestly promised a series of essays "similar in literary character to the leading articles of the *Times*, and papers in the *Saturday Review*!" we can only hope that the conductors of those two eminent periodicals feel themselves flattered at finding themselves in such good company. For our part, it calls to mind the homely proverb of Æsop with its apothegm, "How merrily we *apples* swim!"

The Journal of Mental Sciences. Published by Authority of the Association of Medical Officers of Asylums and Hospitals for the Insane. Edited by John Charles Bucknill, M.D. January, 1861.

This number contains its usual quantity of sober, professional, and eminently practical papers. Dr. Lockhart Robertson's suggestions towards a Uniform System of Asylum Statistics, Mr. Davies's Contributions to Logical Psychology, and Dr. Bushnan's Review of Laycock on the Brain, are well worthy the attention of the class of Practitioners for whom they are intended, and of the educated public at large.

Quarterly Journal of Microscopical Science, including the Transactions of the Microscopical Society of London. Edited by Edwin Lankester, M.D., F.R.S., and George Busk, F.R.C.S.E., F.R.S., etc., etc. With Woodcuts and Lithographic Illustrations. January, 1861.

The usual series of observations on new worlds of *diatomaceæ* and other microscopical families, and on new varieties of microscopes. Mr. Rainey has a good paper on the formation and coalescence of carbonate of lime globules in shells, and Mr. Canton describes a new parasite flourishing on the conjunctiva of the turtle.

Archives of Medicine: A Record of Practical Observations and Anatomical and Clinical Researches connected with the Investigation and Treatment of Disease. Edited by Lionel S. Beale, M.B., F.R.S. No. VI. 1860.

This Medical serial appears to be slowly winning its way to increased circulation, and possesses a deserved popularity

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among men who desire to be acquainted with the newest scientific phase of Medicine. The present number contains a tremendously exact chapter on Clinical Medicine by Dr. W. Ogle, of Derby; good papers by Henry Lee, and Dr. John Ogle; and a fair account of Virchow's Cellular Pathology by Dr. Duffin.

On Capital Punishment for Murder. An Essay. By Lord Hobart. Pp. 35. London: 1861.

Lord Hobart is well known as an acute thinker and polished essayist, and still better as a courageous and honest man, who resigned a ministerial appointment rather than conceal his aversion to the late Crimean war, which he denounced as impolitic and unjust. Many politicians have since shared his opinions, though not his sacrifice. In the present Essay he advocates the abolition of capital punishment, and treats the subject without sentimentality and without declamation. He considers, first, the Scriptural argument drawn from the passage in Genesis, "Whoso sheddeth man's blood, by man shall his blood be shed," and dismisses it on the ground that the genuineness of the text is uncertain, its interpretation doubtful, its authority not perpetual, and, at any rate, not such as to entitle it to respect if capital punishment can be shown less effectual than other means for the suppression of murder. Secondly, he discusses the argument founded on the doctrine of retributive justice; or, we venture to suggest, instead of discussing, evades it. Thirdly, he comes to the broad ground of expediency, on which he holds that capital punishment ought to be abolished. The effects of penal imprisonment for life (which is the alternative) on the morals of the convicts, and of their keepers, and on society at large, require, however, more exposition than Lord Hobart has given them to render this part of his argument faultless. The gallows has its evils; but the *bagne* has some, too. What would Lord Hobart do with a murderer condemned to penal servitude for life who should murder his keeper? We should like an answer in the second edition of his instructive and ably-written pamphlet.

Mysteries of Life, Death, and Futurity, Illustrated from the Latest and Best Authorities. By Horace Welby. Pp. 272. London: 1861.

The idea of producing authorities on the subject of death and the invisible world has a something grotesque in it which reminds one forcibly of the story of Mrs. Veal's ghost. In reality, this work seems to be the production of some industrious person who has occupied himself in extracting from every book within his reach, old and new (or rather, from papers and journals), all that he could find respecting life, time, soul, spirit, faith, ghosts, burial alive, death, sin, the resurrection, the day of judgment, the future state, insanity, and superstition. The authors quoted are too numerous and diverse for enumeration, but they include the most incongruous authorities, such as Bishop Mant and Professor Jowitt, Sir Humphry Davy and John Wesley, the *Saturday Review* and Dr. Cumming. It is not a book to read through, but just the book to dip into at random, and this may be done without detriment to the thread of argument, for there is none.

Nature in the Cure of Disease. A Lecture. By John M. Strachan, M.D., Dollar. Pp. 32. Edinburgh: 1861.

Dr. Strachan once cured a poor man of inveterate ulcers of the legs by procuring him rest and good diet. Proud of his good deed, he was not a little disgusted at hearing from the man's lips, some time afterwards, "Weel, Doctor, I maun tell you what it was that cured my legs, and it will, maybe, be useful to ither folk. It was just moose wabs (Anglicè, spider's webs). Jemmy Donald advised me to try them, and they cured my legs at once." "But don't you think the beefsteaks and porter had anything to do with the cure?" "Ou, the steaks and porter were grand for the stamach." This anecdote will give some notion of the class of prejudices against which Dr. Strachan's well-written pamphlet is directed, and which nestle in the breasts of persons better educated than Jemmy Donald and his ulcerous friend.

A Guide to the Food Collection in the South Kensington Museum. By Edwin Lankester, M.D., F.R.S., Superintendent of the Animal Product and Food Collections. Third Edition. Pp. 149. London: 1860.

This very readable book is not only a popular guide to the knowledge of the various articles of food used by all classes, but, likewise, contains some valuable original analyses by the late Superintendent, Dr. Lyon Playfair. Like most popular works on diet, it sometimes goes too far in offering scientific explanations of facts, and makes statements open to much doubt. For instance, when it affirms that the beneficial effects of salads are mainly due to the mineral matter they contain.

A Few Words on the Curative Power of Systematized Exercises; or, the Movement Cure. By Charles Phillips Collins, M.R.C.S.L. Pp. 36.

"Physical training," says Mr. Collins, "should form a part of the education of youth, as much as literary instruction, music, and the art of design, which together with gymnastics, formed, according to Aristotle, the four branches of education considered essential in his day." No one will doubt this; but whether Ling's course of exercises, which are recommended, but not described, by the author, are better than horse exercise, cricket, fencing, and the like, we know not. That exercise, combining with it some degree of mental occupation, is generally good for the health is true; that Ling's exercises can produce special good effects in a long list of diseases, we doubt, and the writer does not attempt to prove it.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

ESTIMATE OF CHLOROFORM.

By Professor PARAVICCINI.

Professor Paraviccini, giving an account of the events at the Military Hospital at Milan during the late Italian war, after describing the benefit derived from the use of chloroform, thus sums up his opinion as to the propriety of its employment:—1. Considering the matter in a general way, the benefit of anæsthetics is too great for its employment to be proscribed, to the damage of mankind at large, for the sake of the pevention of some distant danger which may occur to an individual. 2. While it is certain that chloroform has given rise to some deaths, it is no less so that many other cases would never have recovered without its aid. 3. Prior to the introduction of this agent many pusillanimous patients preferred certain death to the pain of the Surgeon's knife. 4. The cases were by no means rare in which persons, persuaded at last to submit to operations, succumbed either during their performance, or a few hours afterwards, the moral effort and the physical sufferings exhausting their nervous power. 5. If we are to proscribe a means which, in the vast majority of cases, is of incontestible and immense utility, because in certain very rare instances it may prove fatal, we shall be led to the most ridiculous conclusions, first among which is the proscription of Medicine itself, and still more of Surgery. 6. A simple venesection, executed according to the rules of art, has given rise to fatal phlebitis much oftener than chloroform has led to death; but who is there with common sense that would think of passing a general incrimination and prohibition of it?—*Annali Omodei*, Vol. clxxii. p. 196.

ON UMBILICAL SCIRRHUS.

By M. NELATON.

A woman, aged 60, recently entered M. Nélaton's Cliniquc, and furnished him with an opportunity of describing an affection which, though undescribed in books, it is of importance to recognise in practice. Having a tolerably healthy appearance, she presented in the umbilical region, opposite the navel itself, a small globular and pretty regular tumour, having a diameter of about 2½ centimètres, and surrounded by a circular furrow. The skin covering the tumour was violaceous and adherent, but the parts beyond the furrow

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were quite healthy. M. Nélaton indicated that the tumour was not superficial, as on cursory examination it seemed to be,—for in all similar cases he had found a pedicle stretching more or less deeply inwards. Originating in the cicatricial tissue, it is usually propagated along the umbilical fibrous tissue to the peritoneum, just as though it were a nail implanted in the substance of the abdominal wall, its globular, external part representing the head, while the point stretches towards the peritoneum. These tumours are scirrhous in their nature, but their entire removal endangers the peritoneum. In some subjects the tumour assumes another disposition, the pedicle, having reached the inner side of the abdominal wall, expanding and invading the subperitoneal and peritoneal tissues. There is, therefore, in such an expansion at each extremity of the stalk of the tumour, a subcutaneous and a subperitoneal expansion—the shape of the whole resembling that of a shirt-stud, the contracted portion of which would correspond to the navel. At first M. Nélaton believed that the woman presented an example of this variety of the tumour, as a deep-seated induration was perceptible. A more detailed examination proved that this was due to a voluminous fibrous tumour occupying the fundus of the uterus, the existence of which the patient was not aware of. M. Nélaton determined that he would undertake no operation in this case. In the first place, the complete removal of the pedicle of these tumours, owing to their close connexion with the peritoneum, is a hazardous procedure; and in all former attempts at ablation he has had to make the excision of the tumour amid the cancerous tissue itself. Next, experience has taught him that the progress of this description of cancer is extremely slow, it being essentially chronic, while it exerts no contaminating influence upon the neighbouring parts or upon the general economy. Another practical observation upon abstaining from interference was made by M. Nélaton in relation to the uterine tumour. As long as the woman continued to menstruate she had very frequently suffered from hæmorrhages, but these had ceased since the menopausis had taken place. She was thus rid of that which constitutes the chief danger of these fibrous bodies. It is, then, of importance to bear in mind that the cessation of the menses is accompanied by the cessation of the hæmorrhage, and even of the pains symptomatic of the presence of fibrous tumours of the uterus; but then it is to be also remembered that the menopausis does not take place until a much later period than is the case in women in good health.—*Gazette des Hôpitaux*, 1860, No. 74.

EXCERPTA MINORA.

Laceration of the Lung without Injury to the Ribs.—Dr. Comolli Giovanni relates the case of a lad, fifteen years of age, over whose chest the wheel of a carriage had passed without fracturing any of the ribs. He died on the tenth day of pneumonia, notwithstanding energetic antiphlogistic treatment. At the autopsy no fracture could be detected, but air escaped on opening the thorax, which contained also much fluid. The left lung, filling only a fifth of the cavity, adhered to the parietes, and a laceration was found at the anterior edge of the middle and upper lobes, accompanied by a loss of substance, as well as by an aperture in the pleura. The laceration was about an inch in diameter, and was surrounded by a fragile tissue, infiltrated with pus.—*Annali Omodei*, Vol. clxxi. p. 14.

Case of Hysterical Singultus.—Dr. Ottoni relates the case of a woman, aged 42, widow of an impotent husband, who after suffering for years from hysteria, which had been treated by excessive bleeding, became the subject of that distressing form of it, obstinate singultus. This, at the time of the author's writing, had lasted thirty-four months, with rare intervals of ease, notwithstanding the use of various remedies; and it was always found that any temporary amendment was followed by a subsequent redoubling of its severity. Electricity seemed to be of most benefit, but was not persevered in sufficiently.—*Ibid.* Vol. clxxii. p. 603.

Ox-Gall in Frost-Bite.—Assistant-Surgeon Moore, of the United States Army in Utah, states that he has employed fresh ox-gall with great benefit, when the injury is superficial. It is applied as a liniment or on pieces of lint saturated with it.—*American Medical Times*, No. 25.

Acetate of Lead in Pneumonia.—After trying the various remedies in pneumonia, Professor Strohl, of Strasburg, comes to the conclusion that the acetate of lead given in full doses is the best of all these. When there is plethora he bleeds once, but rarely twice, and when this is absent he only cups or applies some leeches. Soon after the acetate has been commenced the pulse diminishes in frequency; but the local symptoms for a while continue to extend, but this is only for a time, after which they ameliorate and the acetate should be suspended. Convalescence takes place at the end of from five to twelve days, but it is a very complete one, the strength rapidly returning. This treatment is suitable for all the forms of pneumonia, and for all ages at which these appear.—*Gaz. des Hôp.*, 1861, No. 1.

Puerperal Vaginitis.—M. Beau draws attention to a severe form of vaginitis which is sometimes met with supervening on the puerperal condition, which may readily be mistaken for gonorrhœal discharge. It is not very rare, and the women have some difficulty in getting their account of its origin believed. M. Beau, by careful observation, has satisfied himself of the purely puerperal character of the discharge. Like gonorrhœal discharge, it resists treatment obstinately. He finds a solution of nitrate of silver to be the best application.—*Ibid.*, 1860, No. 147.

Cases of Digital Compression in Aneurism.—M. Mirault, of Angers, related two cases to the Paris Society of Surgery. A man, aged 23, was bled, and some time after an aneurismal tumour was observed, which when he was admitted into the Hospital, was about the size of half an egg. Digital compression was made on the brachial artery, at about the middle of its course, from 11 o'clock a.m. to 9 p.m., and next day it was resumed from 6 a.m. to 9 p.m. The tumour became more firm, and the compression was employed again at 6 a.m. of the third day; at 8 the pulsations had become indistinct, and at 12 they had completely disappeared. Thirty-one hours altogether had been occupied in making compression. 2. A child, aged 9, having had the trunk of the temporal artery opened, just anterior to the ear, an aneurism about the size of a nut appeared eight or ten days after the accident. Direct digital compression was employed for five hours on the first day; for ten and a-half hours on the second; for eleven hours on the third; for nine and a-half hours on the fourth; for eleven hours on the fifth; for ten hours on the sixth; for ten and a-half hours on the seventh; and for nine and a-half hours on the eighth,—making a total of eighty-five hours, at the end of which time the aneurism had become cured.—*Union Med.* 1861, No. 1.

FOREIGN CORRESPONDENCE.

GERMANY.

Hamburg, January 11.

A criticism on the Medical Report of the General Hospital at Hamburg, which appeared in the *British and Foreign Quarterly* for October last, may have convinced your readers that, although this ancient town cannot boast of a University, it offers much more *matériel* for the observation of disease and the education of Medical Practitioners than many of the smaller German Universities taken together. There are some sovereign States in Germany in which the number of governors is nearly equal to that of the governed; and so in some Medical Schools there are more professors than patients in the wards or subjects for the dissecting-room. The scarcity of Hospital patients in the smaller German towns is partly to be attributed to their good sanitary condition, and partly to the reluctance of patients to enter the Hospital when they can have the advice of a Physician at their own homes for a remuneration ranging from sixpence to half-a-crown. Some time ago one of these time-honoured seats of learning was afflicted by the circumstance that, during a whole term of six months, there was only one case of acute disease in the extensive wards of the Hospital; and on a close examination of this interesting patient, it appeared that even his case was scarcely one of acute disease properly so called, as he suffered from an exacerbation of a bronchial catarrh of very long standing. The shock felt at this discovery by the Professor of Clinical Medicine was so great that he never recovered from it, and soon afterwards resigned his appointment. Your correspon-

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dent won his first clinical spurs in the wards of a munificently-endowed Hospital, in which there was at one time a patient for whose possession the Physicians and Surgeons struggled with an obstinacy which reminded one of the war between Troy and Greece. The patient was certainly no fair Helen; but his attractions were scarcely less than hers in the eyes of Professors of Clinical Medicine and Surgery, sorely in want of cases to which they might refer their classes, which daily filled the empty wards, eager for a practical demonstration of disease. This patient suffered from a bronchial catarrh of long standing, which had given rise to emphysema of the lungs and a dilatation of the right ventricle. As he was a hard drinker, a furlough of only a few hours was quite sufficient for the production of an exquisite *status gastricus*. The Surgeon claimed him for hæmorrhoidal varices, for an inextinguishable eczema capitis, and immense hypertrophy of the follicles of the nose. He was thus introduced to an admiring audience as a case of disease of the heart, the bronchial tubes, the lungs, the stomach, the rectum, and the skin. The jealousy of the Obstetric Physician, who had no opportunity of turning this factotum of the school to account, may be imagined; and on one occasion the students were thrown into the greatest excitement by the report that this *rara avis* had absconded. Detectives were immediately despatched to effect his capture, and when he was at last brought back into the Hospital, he was greeted with hearty cheers from the delighted students, who had assembled to witness his return.

While thus the practical part of the instruction is, in some cases, very deficient, you have, on the other hand, even at the smallest German Universities, the most complete and systematic theoretical lectures in every branch of the science of Medicine. In this town the contrary is the case; we have a very large hospital, which is always well filled, but the State is too small to keep up a University. There is, however, a learned institution here—the "Gymnasium,"—in which philosophy, theology, history, mathematics, and all branches of natural philosophy are taught. Connected with it is a rich and beautifully-situated botanical garden, and a library of about 200,000 volumes. Quite recently an anatomical theatre has been opened, which is well supplied with subjects for dissection, and which is especially reserved for the necessary anatomical and physiological instruction of that not yet extinct genus of barbers who, together with the useful operation of shaving, hair-cutting, shampooing, etc., combine the art of leeching, cupping, bleeding, etc., operations which are here never performed by Medical Practitioners.

Independently of these institutions there is a Medical Society, which is conducted in much the same manner as the Pathological and Medical Societies of London. Almost all the Physicians and Surgeons of Hamburg belong to this Society, which has done much towards keeping up the scientific interest, and raising the general status of the Profession. The election of members takes place by ballot, and is very rigidly conducted, as no one who has the smallest taint of quackery is admitted, and a committee has the power to strike off the list any members who should be guilty of unprofessional conduct. To this Society are chiefly to be ascribed the cordial relations which exist between the members of the Profession, and the absence of those quack advertisements of nostrums, wonderful remedies, etc., which disfigure the papers of almost every other large town. This Society meets once a fortnight, when clinical discussions and demonstrations of pathological specimens take place, and patients whose cases are in any way remarkable are introduced. The specimens are preserved, and already form a considerable collection. The library of the Society, which was formerly very extensive, but was destroyed by the great conflagration of 1842, has since then been obliged to begin afresh, and is now in possession of nearly twelve thousand volumes of new works; while the library of the town, which is accessible to every one, is well supplied with classical and mediæval Medical literature.

The centre of Medical science in Hamburg is the General Hospital, which takes in all cases of disease among the lower classes, foreigners, and individuals without a home. Hamburg being one of the most important seaports of the Continent, is, as such, continually visited by large numbers of emigrants and journeymen from the interior of Germany, and also by natives of all parts of the globe. We therefore see very much not only of diseases incidental to Germany, but also of such as are contracted in the Tropics. In 1859-60 there were generally between 1300 and 1600 patients in the Hospital. During the year 1859 no less than 7767 patients were admitted, of whom 762 died; while in 1860 the numbers have been respectively 7182 and 656. The great difference of numbers in these two years is to be ascribed to the epidemics of cholera and small-pox which occurred at the same period in 1859, there having been 378 cases of cholora, and 801 of variola under treatment during that year. The surplus of nearly 100 deaths is almost entirely due to cholera, of which 113 died. The deaths in 1860 were not only less numerous than in the preceding year, but even less so than the average of the last ten years. This circumstance illustrates the old experience that the public health after an epidemic is generally remarkably good; or rather, that the epidemic has thinned the lists of mortality of the year following by swelling its own.

The administration of the General Hospital is in the hands of a civic committee, which is again under the control of Government. Every year one of them withdraws from the committee to make room for a new member. The more immediate and daily control of the Hospital is at present confided to Dr. Tüngel, who is at the same time Chief Physician to the Medical wards; and it is but justice to him to state that the organisation of the Hospital has been greatly improved by him. His report for the year 1858 has been very favourably received, and that for 1859, which will contain much interesting matter on the epidemics above mentioned, is just now preparing for publication. The Chief Surgeon to the Hospital is Dr. Knorre, with whose department are connected wards for syphilis and skin diseases. His returns are most gratifying, as hospital gangrene scarcely ever occurs, owing to the utmost rigour in carrying out ventilation even during severe weather. He had lately under his care a very obstinate case of vesico-vaginal fistula, which had resisted all previous treatment, but was completely cured by the operation with wire sutures. Finally, we have the department for the insane. These wards generally contain 560 patients, and it is obligatory to receive into them, free of expense, any of the inhabitants of the town who may be afflicted with insanity. The space of this department is at present insufficient for the number of patients. For more than a quarter of a century the project of a separate lunatic asylum has been mooted, but it was only last year that the final resolution of erecting one was carried; and the building is to be commenced this year. The necessary funds, which amount to nearly £37,000, have been raised entirely by voluntary contributions, without any aid from Government, while nearly all other public lunatic asylums in Germany are exclusively supported by the State. It is intended to take into the new asylum only such cases as are likely to recover, while the old wards will continue to be a refuge to the more hopeless patients. This department has only been thoroughly organised since 1858, when Dr. L. Meyer, of Berlin, a Physician of great repute in the pathology and treatment of insanity, and author of many valuable contributions to the pathology and pathological anatomy of the brain, was called to preside over it. I shall send you in my next letter some more information about his treatment of the insane, especially of delirium tremens, of which disorder nearly two hundred cases have been observed in his wards during the last few years, and the treatment of which has been attended with the best results.

The Chief Physicians of the Hospital do not only, like most of their London brethren, visit their wards three times a week, and make a short tour along the bedsides, but they are obliged to give daily several hours in the morning, as well as in the afternoon, to the close examination of the patients. In order to secure their services exclusively for the inmates of the Hospital, they are prevented by law from having private practice. A liberal salary is paid them by the State, as is also their house-rent. Eight House-Physicians and Surgeons live in the Hospital, and are expected to devote their whole time to their duties. These latter withdraw after a service of three years, when they retire into private practice. The General Hospital thus forms the nursery of Hamburg's young Doctors, and is in this respect extremely valuable to the more opulent classes of the town, as it secures to them Medical attendants who, after a course of study in one or several Universities, have also been thoroughly trained in Hospital practice.

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GENERAL CORRESPONDENCE.

VERDICT OF A CORONER'S JURY.

LETTERS FROM DR. CHRISTISON AND DR. WATSON.

[To the Editor of the Medical Times and Gazette.]

SIR,—May I ask the favour of the insertion of the following statement and letter in your columns?

I am, &c.

GEORGE B. C. WATSON.

Chester, January 12, 1861.

Chester Courant, December, 1860.

"Coroner's Inquest.—An inquest was held at the Faulkner's Arms, Bishops-fields, near this city, on Friday last, before Mr. Henry Churton, Coroner, on the body of Fanny Bruce Sutcliffe, a child six weeks old, which had died on Wednesday morning. From the evidence adduced at the inquest, it appeared that the mother of the child had been suffering from inflammation in the side, and Dr. Watson, who attended her, had prescribed some pills containing compound ipecacuanha powder, and had ordered a fomentation for the side composed of laudanum and gin. The child was put to the breast shortly after the medicine had been administered and the fomentation applied, and, about half-past four o'clock, fell into a sleep from which it never awoke, and it died about nine the next morning. The jury returned for their verdict,—'That the deceased died from the effects of the absorbtion of laudanum externally applied to Fanny Sutcliffe, the mother of the said child; and the jurors are of opinion that Dr. Watson is culpable for not having given more specific directions as to the quantity of laudanum which should have been used as an externnl application, knowing the said laudanum to be a deadly poison.'"

Extract from Dr. Watson's Report, addressed to the Chester Medical Society.

"On November 27 last, I was called to see a lady I was in the habit of attending, the mother of the child whose decease was the subject of the Coroner's inquest. The child was about six weeks old, and the mother had very sharp symptoms of disordered alimentary canals, owing to partaking twice of crude uncooked vegetables. She complained of severe pain and excessive tenderness in the right side,—so great that she could not turn in bed,—and I diagnosed obstruction of the head of the colon, and directed my treatment accordingly. The following was ordered: calomel, three grains, Dover's powder, twelve grains, to be made into a mass and divided into three pills, two of which were to be taken as soon as possible, and the third an hour afterwards. These to be followed by a castor-oil draught and a fomentation of laudanum and gin to her side to be used thus: a piece of linen or calico, the size of a common letter envelope, five inches by three, was to be sprinkled with laudanum, and then about a teaspoonful of gin to be poured over it. To be repeated, if the pain was not relieved. Whilst giving my directions, the inquiry was made,—'What about the infant?' 'You anticipate me,' I replied; 'do not let the child suck whilst the pills can have affected the system.' Next morning I was fetched to the dead child. The mother had been only rendered a little drowsy without sleeping, yet the pain was much relieved, and the bowels had been twice moved. I now proceed to read the depositions, etc., and then I shall have the satisfaction of presenting to you a testimony from one of the most distinguished Medical jurists, to whom they were sent with explanation made before the jury. With regard to these, it appeared that for the depositions Dr. Watson was indebted to the Coroner, and that the explanations of them shows the child was affected with the sniffles from its birth, by the admission of the mother, and lately with troublesome flatulence, owing to her own disordered digestion. Galvanism being applied to the spine after death, a quantity of mucous discharge issued from the nostrils, whilst the face was prone. Experiments made by Mr. Shrubsole, chemist, were also detailed with reference to the saturating power of different pieces of linen soaked in a mixture of equal parts of laudanum and gin; a piece 5 inches by 3 taking 36 m: double fold, 62 m; linen lint, 100 m: cotton lint and other denser fabrics in proportion. But here, however, the nurse had varied from her instructions, using more than a double fold of linen. In spite of this, the mother could only allow the infant to draw one (the left) breast: further still, a letter from a brother Medical (Dr. Dobie) unable to attend the meeting, stated, 'I have frequently, in nursing women, ordered four or five drachms of laudanum to be added to a poultice and applied to the breast itself; yet I never observed any evil consequences to the infant, though it took the breast as usual.' Dr. Watson, on explaining to the jury (not on oath) invited 'censure as to any professional indiscretion, if such there were,' urging that a post mortem examination was needed to exhaust all the causes of death."

Copy of Dr. Christison's Letter.

"Edinburgh, Dec. 19, 1860.

"DEAR SIR,—You will think me slow to answer your letter: the truth is I have already twice nearly concluded a reply, but destroyed it on observing that I had somewhat uncompromisingly censured the coroner's jury, who, after all, cannot help that, in such a matter, they are ignorant *quoad hoc*, and who judged according to their lights. The verdict of the inquest must proceed on one of these views, so far as I understand it.

"Assuming that death arose from the action of opium, the verdict must hold,—1st, That a sucking infant may be poisoned sucking opium unto death by its mother's milk, and without the mother experiencing any effect at all from the drug: or, 2nd, That an infant may die of poisoning with laudanum through exposure to its vapour or fumes: or, 3rd, That in this particular instance death arose from the child sucking, licking, or lying in contact with the pledgets ovensoaked with laudanum. But I do not know a single fact in the records of Medicine to support the first of these views.

"There are positive facts against the second. Orfila, long ago showed that the emanations from opium and its preparations cannot cause poisoning; and I have often been exposed for hours daily, to the emanations from large quantities of opium preparations without experiencing any effect whatever. The third view is the only feasible mode of concerning poisoning with opium in such a case as this. But death could not arise in that way without traces of the manner of exposure to the influence of the poison being discovered; and no such evidence was found, and, indeed, none seems to have been sought for on this occasion.

"In the absence of positive, or even presumptive, proof of a manner in which the laudanum could have acted, the question of natural death falls to be considered. But here the inquiry is altogether at fault. Infants *will* die suddenly or rapidly, in a very obscure way, from natural causes; such cases may imitate poisoning; they require great care in the investigation; and sometimes, with every possible care, the truth cannot be satisfactorily discovered. But a skilful inspection of the dead body is the most likely of all means for making the discovery; and, nevertheless, this measure was wholly neglected. Such neglect vitiates, in my opinion, every conclusion which can be drawn from the other evidence. And hence, were there a 'court of review' in England, as on the Continent, for checking erroneous verdicts, I have no doubt this verdict would be quashed.

"You inform me that the Coroner claims for his jury that they decided the case by the rules of common sense; but common sense in such a question as this, must be according to established Medical fact and doctrine. 'If common sense do not judge in that way, it is certain to result in some very uncommon nonsense.'

"I rather imagine the Coroner meant that his jury judged by intuition; for many people make the mistake of confounding the two guides. But intuition can no more enable an ignorant coroner's jury than a profound Medical philosopher to solve an intricate and novel Medical question, either of fact or theory.

"As for the imputation thrown upon the Medical attendant by the verdict of the inquest, such a result is simply ridiculous, in the circumstances as put before me.

"I am, yours truly,

"R. CHRISTISON.

"Dr. G. B. C. Watson."

At a meeting of the Chester Medical and Ethical Society, held in the Library of the Infirmary, on Monday, Dec. 24, 1860, Mr. Harrison in the chair, the following resolution was

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proposed, seconded, and carried unanimously—"That this meeting having heard read the depositions taken before the Coroner in the case of Fanny Bruce Sutcliffe, an infant, and having heard Dr. Watson's explanation of the case, is of opinion that Dr. Watson is not to blame in his treatment and management of the case, and that he has shown every caution necessary. The meeting is also of opinion that in consequence of there not having been any Medical witness produced before the Coroner, the jury gave their verdict without sufficient evidence, the mother and an old woman who acted as nurse being the only witnesses examined.—John Harrison, *Chairman*. Thomas Brittian, *Secretary*."

PARTIALLY SELF-SUPPORTING INSTITUTIONS.

Letter from Dr. Wilson.

[To the Editor of the Medical Times and Gazette.]

Sir,—In the notice of the Fourteenth Annual Report of St. Mark's Hospital, in your issue of December 22, you say you have never seen any plan proposed to effectually prevent persons who are not fit objects of charity from availing themselves of the benefits of public institutions. Allow me to call your attention to the plan adopted to meet the objection at this Institution—a method which some of your readers, former pupils at this Hospital, will recollect. Before being prescribed for by the attending Surgeon each patient is seen by the Resident Assistant, who first forms an opinion from the personal appearance, etc. as to the social position of the individual, and then inquires if necessary into their pecuniary circumstances. A certain amount of familiarity with the different appearances of the various classes of society, and some knowledge of their circumstances, will be necessary. Dress taken alone will often mislead, for in some persons—as in clerks, milliners, upper class servants, etc.—this forms their stock-in-trade, and their whole capital has generally to be employed in its purchase, as, from their appearance and costume will often depend their employment. The hands alone will often afford a good criterion, as from them we may be able to fix the occupation, and distinguish the mechanic or artisan from the shopkeeper, or the common labourer from the farm employer, the sempstress from her mistress. Subterfuges will occasionally be resorted to, and in such cases a good deal of tact and judgment will be required to elicit the truth. I have known the daughter of a small farmer return in a different costume after having been refused relief on a previous occasion. One of the most frequent "dodges" tried on by the public is that of small shopkeepers and traders sending children to the Institution with servants, or dirty old women, hired, or "got up" for the purpose; yet these are the most usually detected cases, and many of the readers of your Journal will no doubt remember several ludicrous scenes occurring between Mr. Wilde, the little patients, and the persons employed to bring them to the Hospital. Thus, before the charity is bestowed, the circumstances of the patient are inquired into, and many persons are refused the "ticket" who would otherwise have defrauded the charity, the poor, and the Medical Practitioner. Persons present themselves occasionally for relief, however, who, although not able to afford the usual fee, are yet considered not sufficiently poor to entitle them to all the benefits of the charity, and in such cases we make a compromise, and give them the prescription only.

In all eleemosynary institutions, particularly those of a special character, well-to-do persons will apply for gratuitous relief—some designedly, to avoid expense, but some, no doubt, through ignorance. I know that; in the London Hospitals, many such persons are treated, and avail themselves of the charity intended for the poor. We find our system of management to answer very well, and I venture to affirm that, out of the annual 2000 patients treated at this Dispensary, few indeed will be found who are not fit objects for charity or partial gratuitous relief. I should tell you that the Dispensary is not self-supporting—only partially so; and while some pay 6d. per month, many receive advice or medicine free of any charge. I am, &c.

Henry Wilson, M.D.

St. Mark's Ophthalmic Hospital, Dublin.

[If our correspondent will turn to our remarks again he will see that the difficulty we pointed out referred principally to the self-supporting section of Charitable Institutions. The problem to solve is, how to protect the benevolent from fraud, and to encourage provident habits among the poor, without injuring the General Practitioner by offering Cheap Physic to those able to pay ordinary moderate charges.—Ed.]

RADICAL CURE OF HERNIA.

Letter from Mr. Henry Thompson.

[To the Editor of the Medical Times and Gazette.]

Sir,—I beg leave to trouble you with a line relative to Mr. Field's communication in the last number of the *Medical Times and Gazette* on the propriety of excising a portion of skin from the scrotum.

On November 7 of last year I performed, in the theatre of University College Hospital, an operation for the radical cure of hernia, on a plan designed by myself, and differing materially from any method hitherto proposed. But the first step was the removal of a portion of skin from the scrotum; and I am glad to find that we have independently arrived at like conclusions and results. Instead, however, of dissecting up a circular portion of integument, I raised a transverse fold just below the external inguinal ring (as if operating for strangulated hernia), and excised, by two strokes of the scalpel, a triangular portion (base of the triangle upward) of the fold, which produced of course a lozenge-shaped or oval surface denuded of its skin. This process is more simple, rapid, and efficient than that of dissection.

By removing this portion, and invaginating the raw surface, a lax, heavy scrotum is reduced in weight and size; the opposed invaginated surfaces adhere, and the margins of the opening come together so perfectly as barely to require any suture; and, for reasons connected with the subsequent steps of the operation, I prefer not to use one.

These other steps differ, as I said before, from the procedures hitherto employed; and I do not describe them here at present, deeming it better to await the results of several cases, since, however promising the theory may be, the result of practice can alone be relied on to establish its value.

I am, &c.

Henry Thompson.

Wimpole-street, Cavendish-square,
January 14.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, January 8, 1860.

Mr. Skey, F.R.S., President, in the Chair.

A paper, by J. L. Milton, M.R.C.S., was read

ON THE PATHOLOGY AND TREATMENT OF ECZEMA.

The author began by examining the general opinion that eczema was a vesicular disorder—a view adopted by all writers, with the exception of some faint dissent on the part of M. Devergie and Mr. Wilson, who, however, had not sought to interfere with the classification so long established and so generally received. After pointing out that the explanation of M. Devergie—that the development of the vesicles is only momentary—is untenable, and that, in reality, vesicles, so far from being fleeting, are able to bear considerable pressure and friction, he proceeded to state his conviction, and the grounds for it, that true eczema is not vesicular at any period of its existence. Three circumstances, however, were noticed which may have contributed to support the view usually received. The first was, that on parts slightly furnished with hair the discharge of eczema accumulates in minute drops; but neither the course, situation, nor form of these correspond with those of real vesicles. The next was, that in the vicinity of eczematous patches genuine vesicles

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are occasionally found; they last, however, but a very short time; their return or disappearance is very uncertain, and they are not at all dependent on the state of the eczema: it was difficult to say whether they arose or not from the friction of the clothes, irritation of lotions, etc. The third was, the confounding of a genuine form of herpes with eczema. This variety of the disorder was marked by the itching and stinging pain; acute, regular course; and firm, genuine, irregular vesicles. The author considered this as one of the exanthemata, the course of which could scarcely be materially checked by any kind of treatment. It was to this form that he ventured to refer eczema solare and mercurial eczema. Eczema solare, indeed, he considered, was no more eczema or herpes than scabies or blistering from cantharides. He divided eczema into the acute form, in which a large portion of the skin—that of the face, for instance—becomes red, swollen, and stiff, with desquamation, weeping, and crusts; and the chronic. He wished to reject eczema impetiginodes, considering it a different form of inflammation. For the reason that eczema is not vesicular, its vesicles cannot become pustular. He admitted two varieties of the disorder, one in scrofulous children—an elevated and tubercular state of a tract of skin, covered with loose, soft scales, very refractory, and followed by cicatrices; and the ulcerative form, which attacks the ankle and leg in persons of mature and advanced age, often laying the foundation of ulcers. He considered that eczema was essentially a desquamative inflammation of the true skin, and rather to be classed with pityriasis and lepra than among the vesiculæ; pityriasis, indeed, and ringworm, were closely allied affections. As to the treatment, he had always found that, in severe chronic eczema, antiphlogistic treatment was useless as a curative means, and lowering measures were hurtful. They were only serviceable in moderation in the acute form. Of mercury he could not report more favourably; and as, when given to excess, it would bring on a state allied to eczema, as well as a disorder very like scurvy, its value in large doses must be very doubtful. Of iodine and iodide of potassium, except in the scrofulous form of the disorder, he could not speak in any better terms. When rheumatism was present, iodide of potassium, especially if aided by colchicum, was often extremely serviceable, and it would sometimes induce diaphoresis when the skin was harsh and dry. But it was simply to be looked upon as an auxiliary; the author had never been able to cure a single bad case with it alone. Arsenic had not proved of such value as was anticipated, except in the dry stage; and in most persons soon induced such purging, nausea, and irritability, that it had to be abandoned. The tincture of steel, prepared by Mr. Thomas, of Pall-mall, had answered best in his hands. It should be given in full doses, as from half a drachm to a drachm, twice or thrice daily. It should be conjoined with mild aperients; a plain, light diet, containing plenty of fresh vegetables; and active exercise. As to baths, the author placed no reliance whatever on them, except in so far as they contributed to cleanliness, which could not be too scrupulously enforced. Of all the external applications recommended, he had never met with but four on which reliance could be placed. These were—nitrate of mercury ointment, diluted with cold cream, for the head; the oxide of zinc ointment, for any part not covered with hair; the chloride of zinc in the form of lotions; and glycerine, for eczema of the ear. He denied that it was dangerous to check the discharge, even in old persons; in fact, he did not believe it was possible to effect this, except by means which improved the health and cured the disorder.

Mr. Dixon stated that, like the author of the paper, he had had some experience of eczema in his own person. He had, however, arrived at very different conclusions as to its treatment. Instead of putting confidence in the internal administration of steel or any other of the many powerful remedies adverted to, he believed that in a majority of cases drugs were only prejudicial. In his own case, after long treatment by a specialist without good result, he had obtained relief by letting alone drugs and by the employment of counter-irritation to the spine. The form in which he had used the latter was the tincture of iodine. This local application he had employed in many cases with most marked benefit. In some instances he had seen benefit from petroleum given internally, but it had often failed.

Dr. O'Connor could support Dr. Dixon's testimony to the benefits to be derived in eczema from applying the tincture of iodine to the spine. It was, however, only one amongst many other forms of counter-irritation which were useful in the same manner. From his experience at the Royal Free Hospital he could, however, speak strongly as to advantages of a tonic treatment in eczema. He had often used iron, but gave decided preference to the iodide of that metal as supplied in Blancard's preparation of the proto salt. He had a strong dislike to the over-drugging plan, and held that in many cases of eczema it was best to give nothing, and to rely on counter-irritation to the spine and attention to diet. He reprobated in strong terms the indiscriminate drugging which he said seemed to have been practised in the cases referred to in the paper.

Mr. Hutchinson observed that the one novelty in the paper was the statement of the author that eczema was not a vesicular disease. The author had averred that eczema was more nearly allied to psoriasis and pityriasis than to vesicular affections, and yet, towards the end of his paper, he had described a case in which a man with eczema on his legs came to him "with his shoes half full of water." Surely there was some discrepancy here. He (Mr. Hutchinson) begged to protest against the statement that eczema was not vesicular as founded upon incorrect observation. Since the reading of the first part of the paper in which this heresy had been broached, he had, on several opportunities, directed the attention of others to examples of eczema in which all who saw them agreed that there could not be a shadow of doubt as to the existence of visible vesicles.

Dr. Barclay agreed with Mr. Hutchinson, that the chief feature in Mr. Milton's paper was his assertion that eczema was not a vesicular disease, and he also agreed with him in thinking that this statement was wholly at variance with careful observation. With regard to the advocacy of steel as a remedy for eczema, he thought that a most important fallacy was involved. Eczema was not always the same disease. As met with amongst the poor at our Hospitals, it was undoubtedly associated with debility and anæmia; but still we often met with it amongst the well-fed and the robust, and not infrequently in the gouty or rheumatic. Now nothing could be more false to sound principles than the advocacy of a single measure of treatment for a disease which in its essential nature presented such great differences. It was, in fact, treating a name—a mere symptom of constitutional changes which ought first to be accurately investigated, and their differences clearly recognised. He must, therefore, beg to express his entire dissent from the two main propositions of the author, believing as he did,—that eczema was a vesicular disease, and being quite unable to admit that treatment by steel was at all appropriate to many of its various forms.

A paper, by Mr. John Wood, was read

ON AN OPERATION FOR EXTRACTING A STONE FROM THE BLADDER BY URETHROTOMY AND DILATATION OF THE PROSTATIC URETHRA BY MEANS OF A DILATING-STAFF.

The author first called attention to some points in the relative anatomy of the pelvic viscera, important in estimating the value of the different perineal operations of lithotomy. These were illustrated by a diagram embodying the mean results of the dissection and measurements of upwards of forty subjects, and by drawings of the alterations produced by development from the period of birth to adult life, taken from actual dissections of subjects at birth, at two years and a-half, eight and a-half, and sixteen years, and in the adult. He showed that the surface of the perinæum lies in two planes, anterior and posterior, intersecting each other just behind the bulb of the urethra; and that a line drawn from the middle of the central tendon perpendicular to the posterior of these planes indicates the axis of the bladder when moderately distended, entering it at the urethral opening, and thus forming a safe guide for the finger and instruments in the perineal operations of lithotomy. In young children, this line is thrown more forwards, forming an obtuse angle with the posterior plane. He stated that the nomenclature of the pelvic structures in anatomical works had not had sufficient reference to their actual position in relation to the axis of the trunk in the erect posture. He showed that the proximity of the bulb of the urethra to the anus and rectum varied, in the adult, from three-quarters of an inch to an inch and a-half. At birth

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they are in close contact; below the age of puberty, from half-an-inch to three-quarters distant from each other. This was not sufficient room for the performance of Allarton's operation without considerable section of the bulb, which he considered objectionable, if it could be avoided. He attached much importance to the preservation intact of the deep layer of deep perineal fascia, where it is blended with the fibrous capsule surrounding the prostate, forming the grooved sheath of the levator ani muscle; and attributed to the median class of operations a greater safety against extravasation of urine above the levator ani, from their preserving this layer of fascia entire. In the lateral operation it was fairly divided, together with more or less of the levator ani. He thought that, if the levator were cut at all, it was better to cut it freely, to allow a free escape for the urine; but that it afforded a greater safety to the patient in all cases in which the size of the stone rendered it practicable, not to open its sheath at all, but to proceed by dilatation from the urethral surface of the prostate. The author then briefly passed in review the comparative merits and disadvantages of the lateral and median operations. The lateral operation had the advantage in celerity of execution, and when practised with a free incision, in the more facile removal of a large or encysted stone, and in the free escape of the urine. In safety to the patient of adult years, however, it is inferior, from the impending dangers of hæmorrhage and pyæmia, by its extensive interference with vessels and venous plexuses; and from extravasation of urine into the layers of pelvic fascia above the levator ani, by the section of this muscle, its fascial sheath, and of the prostatic fibrous capsule. When the limited prostatic incision is attempted it is more liable also to the accident of the finger slipping from the staff and forcing its way between the bladder and the rectum, especially in the yielding tissues of young children. In the free incision, on the other hand, accidental section of the ureter and other important deep-seated parts has had fatal results. The median class of operations, depending upon dilatation without section of the prostate and neck of the bladder, has the advantages—that no cutting instruments enter the bladder or prostate, and that the incision is confined to aponeurotic structures in the most direct way to the bladder, and does not interfere with arteries or veins of any importance at all. In Allarton's method he thought the means of accomplishing the dilatation were insufficient in the adult, and that additional dilators or gorgets were objectionable on the score of complication and loss of time; that the bulb was freely cut, especially in children, and that the ejaculatory ducts were sure to suffer extensively from laceration by the probe tearing in the median line. He believed that section of the bulb diminished the chances of the patient, by exposing him more to the dangers of pyæmia and hæmorrhage, or the consequent formation of a stricture. The incision also, in Allarton's method, was placed so far forwards, and was so limited in extent, that great difficulty had been experienced in seizing and extracting a stone in a deep perinæum. The author considered that our increased experience of the results of lithotomy in the adult, had not as yet been followed by such a diminution of its consequent mortality as might have been expected. The operation he had practised was based upon the use of a staff opening at the curve into two blades, which admit between them, through a perineal incision into the membranous urethra, the forefinger of the operator, to effect the chief part of the dilatation. The dilating power was increased by the pressure of the assistant's thumb upon a lever, which causes the posterior blade to turn upon its axis, and to press backward upon the base of the bladder, holding it firmly towards the perinæum, so as to prevent its yielding before the pressure of the dilating finger. With the slender model which was exhibited, and which was made for a child, the author had dilated in the subject many tough adult prostates sufficiently to extract good-sized stones without injury to the levator ani or its sheath, or to the prostatic capsule. To make the preliminary incisions he used a very narrow-bladed knife. The form of incision he had practised was a lunated one, commencing two lines to the right of the raphé, just behind the bulb, and carried in a curve to a point midway between the anus and left tuber ischii, terminating opposite to the former. The membranous urethra was then opened (upon a groove exposed by the divergence of the blades of the staff) from the bulb to the prostate gland, a little to the left of the median line, as in the lateral operation, to avoid injuring the ejaculatory ducts. The lateral tension of the urethra rendered this very easy to do. The rest of the opening into the bladder was done entirely by dilatation between the blades of the staff. The patient, a boy aged nine years, was operated on in King's College Hospital on December 1, 1860. He had had symptoms of stone one year. The dilatation was easily and speedily accomplished, the stone at once reached and removed, only a few drops of blood being lost. He made a rapid recovery; the urine passed by the meatus in the first week, and entirely by the natural passage in a fortnight, when he began to have control over its evacuation, which in the third week increased to entire command. In less than a month the wound was entirely healed. This showed how little injury was done to the neck of the bladder and muscles. The author thought that the form of incision he had used had all the advantages of the median operation, with much more room to use the forceps, etc., without injury to the bulb, rectum, and ejaculatory ducts, and with an easy capability of extension, in case of a large stone, in the site of the lateral operation, but ordinarily without division of the deep layer of deep perineal fascia. The advantages of the dilating staff were: that the lateral tension renders a clean cut into the membranous urethra, and a fair introduction of the finger to dilate, easier to accomplish; that the dilating finger is guided into the prostatic channel with the increased certainty of a conducting blade on each side, and is aided by the dilating action of the blades holding down the bladder, and preventing its yielding before the pressure of the finger, allowing it at the same time more complete tactile perception of the resisting tissues than can be obtained by the use of gorgets or dilators, which are also thus rendered unnecessary. The pressure of the separated blades guards against the passage of the finger between the bladder and pubes on the one hand, and the bladder and rectum on the other. Lastly, there is a more positive certainty of avoiding section of the prostatic capsule, and exposure to the deleterious action of urine effused into the pelvic fascia above the levator ani, than can be obtained by the use of the knife or gorget in the prostate cutting in opposition to the contracting levator ani.

Mr. Fergusson stated that he rose unwillingly. It had usually been his lot when addressing that Society, to speak more or less in unison with the views expressed by the authors of the paper under consideration; in the present instance, however, he could not do so; and the pain which he felt in taking a different course was increased by the fact that the author of the paper was an old pupil of his, and now a highly esteemed colleague. Still lithotomy was an important subject, and he must not suppress his opinions. In the first place, he would express his regret that an opinion should be given upon a practical subject on the strength of only a single case. With regard to the anatomical details which Mr. Wood had entered into, he must protest that there was nothing which had not been for long well known to educated Surgeons. There was nothing which he had not himself long ago been accustomed to teach. The diagrams which Mr. Wood exhibited in demonstration of these anatomical facts were, indeed, more excellent than any he recollected to have seen, and would be most useful in the class-room. Still, they did not show anything new. With regard to the instrument, he could not approve of it, and could not think that it was likely to render lithotomy either a safer or an easier operation. He need not remind many of those present that it often required considerable force to dilate the prostatic part of the urethra. Whether the dilator employed was the Surgeon's finger, or the extracting forceps used as a wedge, it was often necessary to employ a considerable amount of force. The weak blade of Mr. Wood's instrument would, he could not but think, prove altogether inadequate to this task. As to the keeping the urethra on the stretch at the time of introducing the knife, which Mr. Wood proposed to accomplish by separating the blades, he should much prefer to secure it by the use of a full-sized staff, as large as the urethra would admit, and having a wide groove. But the proof as to the comparative utility of one or other instrument must be sought in actual practice, and he would again deprecate the attempt to found strong recommendations on the result of a single case. It would require from fifty to a hundred cases to allow of any fair deductions, and even then, in making them, it would be needful to carefully bear in mind the ages of the patients. Indeed, it might be alleged,

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that we had little more to wish as regards lithotomy in children when we remember how small the average mortality is; and that many Surgeons had operated from twenty to thirty, or even forty times, without losing a patient. He was an advocate for the limited incision of the prostatic urethra, which he had always endeavoured to practise.

The PRESIDENT next rose. He stated that he was not at all opposed to innovations, if cautiously conducted, and was always glad to welcome what might seem to be improvements, even in operations which had for long claimed great attention from most sagacious Surgeons. He believed that the incisions advocated by Mr. Wood were certainly better calculated to avoid hæmorrhage than those of the ordinary lateral operation. He agreed, however, with Mr. Fergusson in thinking that Mr. Wood's instrument was unfitted for purposes of dilatation. In respect to wounding the bulb, he held strongly that in most lithotomies the incision, more or less, implicated that structure. Sir Astley Cooper used to speak of holding it aside with his finger, when making the deep incision, but he (Mr. Skey) could only say that he had often seen it wounded in the dead-house by a Surgeon who had, just before, himself laboured to impress on his class the importance of avoiding it. The accident which he thought it of paramount importance to avoid was incising the neck of the bladder, and it was on account of additional care in this respect of late that lithotomy had become a much less dangerous operation. Still, however, although he had seen many free divisions of the prostate and adjacent parts, yet he must say that he had never witnessed the division of the ureter, to which Mr. Wood had adverted. Considering the anatomical relation of parts he should suppose that this accident could scarcely occur, and it certainly ought not, except in the most rash hands.

Mr. WOOD, in reply, thanked the President and Mr. Fergusson for their able criticisms of his paper. He would remind them both that he had not intended to use the staff as a means of forcible dilatation, for which, as they had remarked, it was manifestly inadequate. It was by the finger introduced between the blades that forcible distension was accomplished: the blades being useful merely to facilitate the introduction of the finger.

THE PATHOLOGICAL SOCIETY.

TUESDAY, DECEMBER 18, 1860.

MR. FERGUSSON, President, in the Chair.

Mr. WOOD read the following report, by Dr. Wilks and himself, on

A SUBSTANCE FOUND IN A HERNIAL SAC.

"After examining the oval body found in a hernial sac, we are of opinion that it resembles very closely other specimens which have been exhibited to the Society, and especially one shown by Mr. Shaw, and described and figured in Vol. vi. of the *Transactions*. The shape is egg-like, half-an-inch in short diameter, and at the smaller end are evidences tolerably distinct of the former existence of a pedicle of attachment. This pedicle is seen on section to be continuous with a mass of adipose tissue somewhat condensed and convoluted, and making up the principal bulk of the body. At the edge of this is a thin layer of hard, gritty, calcareous crust. Investing this externally is a dense capsule, cutting like cartilage, and appearing on section like hard boiled white of egg. Under the microscope this outer rind, when pared in cross section, exhibits a fibrillated appearance, but in a flat section presents distinct appearances of a laminated, homogeneous character. We think that the characters presented by the substance fully corroborate the opinion expressed on a former occasion that this is an 'appendix epiploica,' altered in the manner here seen."

Mr. FERGUSSON asked Mr. Wood if he believed the laminæ were deposited before or after detachment.

Mr. WOOD believed that they were deposited after they were detached; and in reply to a question from Mr. Hulke, stated that he arrived at this opinion from never, after many examinations, having found them enlarged when attached.

Dr. WILKS stated that he had frequently found them enlarged when attached, and believed that generally they attained their full size before they dropped off into the cavity of the peritoneum.

Mr. HULKE read the following report on the state of a limb removed by amputation more than a year after

EXCISION OF THE KNEE-JOINT,

exhibited by Mr. Holmes on December 4, 1860 (a):—The bones were not united posteriorly by any direct connexion. Anteriorly a partly osseous material was deposited between the tibia and femur, forming a solid union, which, however, allowed a little obscure movement. On examination of this material it proved to be in great part cartilaginous. A very small slice only had been removed from the end of the femur, leaving remains of the articular cartilage on the front of its condyles. Small microscopic sections taken from this latter situation showed the cartilage in process of disintegration, without any trace of ossification. Between the bones the cartilage stretched from one cut surface to the other, in the form of rounded nodules, some of them nearly as large as peas. Of these some displayed an obscurely fibrous structure; the cartilage cells being elongated and containing numerous nuclei. In others the structure was almost identical with articular cartilage. Ossification was progressing in these cartilaginous nodules, so that laminæ were to be found in them; and in some parts canals were seen which appeared analogous to the natural Haversian. Taking into consideration the situation of this deposit, between the cut surfaces of the bones, its shape and thickness, and the evidences of its ossification, we conclude that it is a new formation, and that the union of the two bones is brought about by ossification in cartilage. Whether that cartilage was an independent formation, or an outgrowth from the cut surfaces of the articular cartilage, we are not prepared to decide.

Mr. HOLMES would now add to the report a few particulars which time did not permit him to mention at the last meeting. The ends of the bones presented the appearance of inflammation. There was also great inflammatory thickening of all the tissues around the joint. At the back of the joint was to be seen a ligamentous tissue, stretching from the tibia to the femur, something like, but not quite in the direction of Winslow's ligament. He alluded to this last point to show how small a part of the tibia had been removed. In reply to the President, he said that the amputation was resorted to as the patient was suffering much from pain and continual discharge, and as he seemed gradually getting worse.

Mr. GANT stated that at the operation he removed a very small slice of the ends of the bone; but he had completely removed the disease, as the section presented well-marked characters of healthy bone. The removed pieces had not been kept, and he could not state from memory the exact condition of the articular surfaces. The patient had had disease of the joint for five years. He recovered slowly from the operation; but at the end of eight months he seemed to be almost well, and could stand on the limb.

Mr. CROFT exhibited a specimen showing

ABNORMAL POSITION OF THE POPLITEAL ARTERIES ON BOTH SIDES.

It was taken from a body in the dissecting-room of St. Thomas's Hospital. On each side the deviation of the artery from its natural course was caused by an abnormal attachment of the inner head of the gastrocnemius muscle to the popliteal space of the femur. In the left limb, the gastrocnemius was attached by its inner head to a spot in the popliteal space midway between the median line of the space in the femur and the line leading from the linea aspera to the inner condyle. In consequence of this, the artery took a course from the point at which it appeared coming through the adductor magnus, downwards, behind the tendon of the muscle, to a channelled space between the abnormally attached inner head of the gastrocnemius and the inner condyle, thus being excluded from the ordinary course between the two heads of the muscle, and diverted to its new position immediately behind the inner condyle of the femur. The centre of the popliteus muscle was gained by the artery taking a direction outwards beneath the attachment of the muscle; and it divided into anterior and posterior tibial arteries at the usual spot. On the right side, the inner head of the gastrocnemius was not only attached to the popliteal space, as on the left,

(a) See Report in this Journal, December 15, 1860.

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but was divided into two portions—an inner or tendinous, and an outer or fleshy portion. The artery in this limb followed a course behind the tendon of the adductor magnus, similar to the one on the left, but instead of deviating to the space between the muscle and the inner condyle, passed between the two portions of the inner head of the gastrocnemius. The central line of the popliteus muscle was gained by the artery pursuing a course outward, beneath the inner head of the gastrocnemius. The tibial trunks were given off in the usual places. In each limb the artery was accompanied by a small vein, which ran upwards to join the femoral, while the large vein, resulting from the tibial veins, passed upwards between the heads of the gastrocnemius muscle to join the profunda vein on the middle third of the back of the thigh. The nerves followed their usual courses in each limb. On the left side an irregularity occurred in the termination of the profunda artery of the thigh. The terminal branch was continued downwards as far as the popliteal region, where it ended by supplying the articular arteries of the knee-joint. The interest excited by these specimens is chiefly on the fact of the extreme rarity of instances in which the popliteal arteries have been found displaced by any but diseased growths or structures.

Mr. Fergusson then narrated a case, showing the value of the specimen as illustrating abnormal position of the artery. The case was one of extraction of a bullet, which had been lodged some time in the popliteal space. The excision required for its extraction would have wounded the artery if it had been abnormally placed, as in Mr. Croft's specimen.

Dr. Ogle next showed drawings and a specimen from a case of

EXTRAVASATION OF BLOOD INTO THE PONS VAROLII, AND ONE OF THE CRURA CEREBELLI —RAPID DEATH BY APNŒA.

R. H., a man, aged 45, for several years had been subject to so-called asthma, and, latterly, the dyspnœa had been worse. For some time also he had complained of headache and been depressed in spirits. On the morning of his admission into St. George's Hospital, while dressing, he complained of pains at the back of the head, and of a "strange feeling at his feet." There was "no fit." Great pain in the head, complained of shortly before he came to the Hospital; he then had great "tremblings of all the limbs," and, immediately afterwards, became quite unconscious. When brought in, the lips were livid, the skin warm. There was frequent vomiting, and the breathing was slow and deep. Pulse 78, rather full and compressible; same at both wrists. Eyelids drooping; no facial distortion. Pupils of both eyes dilated and equal, but neither of them responded to light. There was much "trembling" of the whole body, and also complete loss of voluntary power, and of sensibility of the skin in all the limbs, which could, however, be freely flexed. Consciousness entirely gone. The breathing became slower and the pupils very unequal, the left one becoming much the smallest of the two. He died about an hour and a-half after admission. Post-mortem Examination:—The scalp and cerebral membranes were very distended with blood. The cranial bones natural. Cerebral membranes were natural. The cerebral lobes were natural, but extending across almost the entire width of the pons varolii, and actually bursting through the surface of the left side was a large extravasated mass of blood. This occupied about the three superior fourths of the substance of the pons, approaching so near the base of the fourth cerebral ventricle as to give way into it on very slight pressure. The inferior fourth part of the substance of the pons varolii (the portion nearest to the occipital bone) was natural in appearance. This extravasated blood extended so as to touch the upper part of the medulla oblongata. It was, moreover, continued downwards into the central part of the right crus cerebelli, reaching into the cerebellum. A few large vessels at the base of the brain were atheromatous, but only to a slight degree. Microscopical examination did not reveal evidence of any softening or any alteration in the capillaries about the diseased part.

Dr. Ogle remarked that the following points in this case were of interest:—1. The extravasation of blood into the substance of the nervous structure, in which so very little or so localised a change of texture or of blood-vessels existed as to avoid detection by the microscope. 2. The absence of unconsciousness at the onset of the seizure. 3. The subsequent loss of "intelligence," a symptom so complicating the diagnosis as to the exact seat of lesion. 4. Absence of muscular rigidity. 5. The dilated and equal state of the pupils at first, and subsequently the contracted state of but one, and that on the side corresponding to the greatest amount of extravasation in the pons. 6. The suddenness of death, and that from apnœa.

ATROPHIC SOFTENING OF THE PONS VAROLII —EMBOLA OF ONE OF THE CEREBELLAR ARTERIAL BRANCHES.

J. C., aged 50, was admitted into St. George's Hospital, first with symptoms of pleurisy, and was discharged pretty well in about six weeks. He subsequently was seized with "a fit," and was found on the floor insensible, but was not then hemiplegic. He became so shortly, and was again admitted with complete loss of voluntary power and of sensibility of the skin on the "left side." The limbs were quite lax. The right corner of the mouth and the outer edge of the right eyebrow were depressed. He was unable to articulate a word, but appeared to understand what was said to him. Pulse 88, soft, full. The urine had to be drawn away by catheter, and subsequently contained a trace of albumen. He gradually became comatose and died. On post-mortem examination, much subarachnoid fluid and a "wet brain" was found, and the central part of the pons varolii was very greatly softened, and of a cream colour. The other parts of the brain presented nothing unusual. The basilar artery was very atheromatous, irregular, and dilated, and all the large cerebral arteries were atheromatous. In one of the cerebellar arteries a large and firm clot of dark-coloured fibrin existed, quite plugging it up. The heart's walls, and valves, and appendages were natural in all respects. There was a largish clot of coagulated fibrin and blood in the left ventricle. The lungs were healthy; old pleuritic adhesions existed. The kidneys were congested; other organs natural. It is worthy of observation that in this case, whilst a full plugging of a cerebellar arterial branch existed, giving rise most probably to atrophic softening of the central part of the pons varolii, yet nothing like fibrinous fringe or deposits were found upon the valves of the head or their appendages. Of course there can be no doubt that "such deposits may have previously existed and have been removed."

APOPLEXY, WITH PECULIAR TETANIC SPASM—SLIGHT SOFTENING OF, OR EXTRAVASATION OF BLOOD WITHIN, THE PONS VAROLII—VERY LARGE CLOT IN THE RIGHT CEREBRAL HEMISPHERE AND THIRD AND FOURTH CEREBRAL VENTRICLES.

W. A., aged 50, a plumber, of gouty family, but temperate habits, lost the use of both arms and hands, and had an attack of colic some twenty years ago. He quite recovered in about six weeks (according to his own statement), and some years subsequently had a second attack, but this time there was no paralysis. On recovery, he was seized with "a fit," lost his consciousness, and became very violent for twelve hours. He quite recovered, and except occasional pains in the limbs, supposed to be rheumatic, remained well. On the day of admission, while on a scaffold "in the recumbent position," painting the roof, he was seen to roll over and was found insensible. On admission, the surface was warm, excepting the right leg and foot, the temperature of which was much lower, and the superficial veins on the right side of the body were specially turgid. There was a decided blue gum-line. Suffocation was produced in attempting to swallow, and the left aperture of the nose was sunken more than the other, no movements of the alæ nasi existing during respiration, and the breathing was rattling and jerking. The impulse of the heart was very strong, and visible pulsation existed in the right carotid and subclavian, while the left carotid could hardly be felt, pulse of right wrist the fullest. There were no tremors, but frequent attacks of tetanic spasm every few minutes, and in the interval the muscles of the arms and legs were very rigid. Total loss of voluntary power and sensibility of the skin; right side of the face with the weakest muscles. No vomiting. Much reflex action on tickling the left side of the foot, but not so on the right side. Right pupil dilated and oval. Subsequently the left pupil became dilated. The tetanic spasm and rigidity of the muscles ceased, and the patient gradually died, the left pupil becoming

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more dilated than the right. On post-mortem examination, a very large extravasated clot of blood was found in the substance of the right cerebral hemisphere, and also filling the third and fourth ventricle. Moreover, there was a small quantity of extravasated blood and some degree of softening in the centre of the pons varolii, where some of the veins were very large and dilated. The arteries at the base of the brain were very atheramatous. The left ventricle of the heart was much hypertrophied. The kidneys were atrophied and granular. The liver contained a large hydatid cyst.

How far in this case was the difference in the pulsation of the blood-vessels on either side of the neck, etc., attributable to modification of vaso-motor influence as a result of lesion of nervous centre? or was their difference dependent upon pressure upon the vessel by morbidly contracting or rigid muscles? The tetanic state of the muscles was most interesting.

Dr. Schulhof exhibited a specimen of

MALIGNANT DISEASE OF THE RECTUM AND ADJACENT PARTS.

It was remarkable, he stated, that very little pain had been suffered during life.

Mr. Ashton said that it was not at all unusual for cancerous disease of the rectum to be unattended by pain.

Mr. Prescott Hewett gave the details of a case in which there had been no pain. The patient died at length from constipation, the bowel becoming quite occluded. Fæcal matter had escaped from the bowel into the peritoneal cavity for some time before death.

Dr. Gibb (for Mr. Curran) exhibited a specimen showing

INTUSSUSCEPTION IN A HORSE.

The animal was a small, black horse, which suddenly had severe symptoms of some abdominal affection, and died twenty-four hours afterwards. At the *post mortem*, obstruction, large fæcal accumulation, and great congestion of the intestines appeared. Intussusception of the small intestine, to the extent of about twelve inches, was the cause of the obstruction.

Mr. Canton exhibited a specimen of

ANEURISM OF THE APEX OF THE LEFT VENTRICLE OF THE HEART.

The patient was a gentleman, aged 49. He died suddenly. He was a large, well-built, muscular man, and, up to the time of his death, had always had good health. No heart symptoms had ever been complained of, and he was not known to have suffered from rheumatism. Lying over the pericardium were large, rounded masses of fat, which entirely concealed this membrane from view. The pericardium itself was intimately adherent to the heart in every part of its extent, and, to some degree, to the great vessels at the base of the organ. The left ventricle of the heart was much hypertrophied, except at and above the apex, where the walls were exceedingly attenuated, at the expense of the inner portion of them. The parietes of this dilated part, which was large enough to contain a plover's egg, were composed without of adherent pericardium and degenerate muscular tissue, and within by the endocardium thickened and opaque. To the latter were firmly attached some small flakes of old and laminated fibrine. The dilated part was otherwise smooth, being entirely destitute of fleshy columns; and the endocardium, immediately above the wide and direct opening of communication between the aneurism and the ventricle, was thickened and quite opaque.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, January 2, 1861.

Dr. Tyler Smith in the Chair.

This was the second annual meeting of the Society, and the officers for 1861 were elected.

THE ANNUAL ADDRESS.

This was delivered by the newly-elected President, Dr. Tyler Smith, who referred in feeling terms to the loss the Society had sustained in the death of the late President, Dr. Rigby. He dwelt upon the high reputation of Dr. Rigby's father as an accoucheur, and the careful education and training of the son in all that could render him fitted for a successful career in midwifery. He enumerated his published works, alluding to the views held by Dr. Rigby in regard to the constitutional treatment of uterine disease—to his efforts in engrafting the mechanism of labour as taught by Naegelé upon English midwifery—and to his devotion to the record of "cases" as one of the greatest and surest means of advancing Medical knowledge. He also enlarged upon his successful career as a Practitioner, lecturer, and examiner; and especially upon the services rendered to the Obstetrical Society by his conduct as President, and his exertions during the early formation of the laws and constitution of the Society. He concluded this portion of his address by putting to the Society the following resolution of sympathy and condolence, which had been prepared by the Council, and in which it is almost needless to say the Society most cordially concurred:—

"This meeting being informed of the death of Dr. Edward Rigby, the first President of the Obstetrical Society, is desirous of expressing publicly its great regret for the loss the Society and the Profession have thereby sustained.

"The Fellows of the Society desire to record in the warmest manner their grateful recollection of his unvarying ability, courtesy, and urbanity, while presiding over their meetings."

Ordered,—"That this resolution be recorded in the Minutes of the Society's Proceedings, and that the Honorary Secretaries be directed to forward a copy of the same to the relatives of the deceased, expressing at the same time the sympathy of the Society with their bereavement."

In detailing the progress of the Obstetrical Society during the year, mention was made of the large accession of new Fellows; the publication of the first volume of "Transactions," and the "Register of Obstetric Cases;" the appointment of local secretaries; and the meetings which had taken place respecting the amalgamation of the different Medical Societies.

Dr. Madge exhibited

THE PARTS INVOLVED IN A CASE OF UTERINE HÆMATOCELE.

This gentleman showed all the pelvic viscera, taken from a woman who died of the effects of uterine hæmatocele. Accompanying the preparation was a large clot and about a pint of blood, taken from the cavity in the posterior half of the pelvis forming the hæmatocele. Also, from the same subject, the inferior vena cava, and some of the veins of the pelvis, containing casts of fibrin, which had existed in connexion with phlegmasia dolens of both legs.

A paper, by Dr. T. H. Tanner, was read, on a case of

FIBROUS TUMOUR OF THE UTERUS.

The following are the most important points in the history of this case:—The patient first applied to Dr. Tanner on June 6, 1855, when she stated that she was thirty-four years of age, and had been married seven years. She thought she had been pregnant twice, and had miscarried each time at an early period; though subsequently she was convinced that this opinion was in all probability erroneous. The catamenia, first became more abundant than usual in 1852; but it was only about the middle of the year 1854 that frequent and prolonged attacks of flooding were experienced. During the four months, from the beginning of February until her application to Dr. Tanner, the catamenia had been on constantly. Mrs. H—— was a remarkably fine, tall woman, and very stout; but the loss of blood had given an exsanguine appearance, and rendered her very feeble. On a careful examination, several times repeated, it was found that the abdominal parietes were so loaded with adipose tissue that it was difficult to learn the condition of the viscera; but there was greater dulness over the hypogastric region than elsewhere, and such a sense of resistance as would be communicated by a solid tumour. On practising the touch, per vaginam, the uterus was found very high up, and almost out of the pelvic cavity, so that the cervix could scarcely be reached. The os uteri was seen, by a long speculum, to be very contracted; and attempts to pass a small bougie into the uterine cavity were unsuccessful. She stated that occasionally the uterine discharge was like dirty

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water, and of a very offensive smell. Relief had been sought from two eminent Practitioners, but without any benefit. The diagnosis made was this:—There is probably some small foreign body in the uterus, but what the exact nature of the substance may be is doubtful. There is also some ovarian or uterine tumour occupying the lower part of the abdomen. From the month of June, 1855, until the day of her death, December 27, 1860, she was constantly under the care of Dr. Tanner. The flow of blood from the uterus was always checked with great difficulty: and generally a few days after it was controlled, it was again excited by the return of the catamenial period. Astringents of all kinds were freely tried on various occasions; but at no one time did they effect any good whatever. Amongst the remedies which proved useless it may be as well to mention the acetate of lead, ergot of rye, the mineral acids, gallic acid, cinnamon, iron alum, the sesquichloride of iron, etc. Opium was of no value; and the infusion of digitalis did harm. Neither was any benefit derived from galvanism, or from the application of ice, or from plugging the vagina with cotton wool. The only agent which had any effect in checking the hæmorrhage was mercury; and to this agent Mrs. H—— owed her life on three or four occasions. It is important to notice that the good effects of this mineral were obtained as soon from the bichloride of mercury as from calomel given to the extent of salivation. During the last few months, however, the patient became much exhausted by her long illness, and at the same time she suffered much from irritability of the stomach, so that there was sometimes an inability for several days to take stimulants and nourishment by the mouth. She gradually became weaker and weaker, but did not lose flesh, and at length sank exhausted on December 27, 1860. At the autopsy, a few hours after death, Dr. Tanner found the body quite bloodless. The adipose tissue on the abdominal walls was two inches in thickness; the lower part of the abdominal cavity was occupied by an oval cyst, which was apparently formed by a stretching upwards of the peritoneum over the fundus uteri; it contained a pint and a half of fluid, while a smaller cyst had only two drachms. By means of this cyst (which rested on the wings of the ilia) the uterus was kept out of the pelvic cavity. On examining the cavity of the womb, it was found to contain a fibrous tumour, about the size of a very small orange cut in half. The tumour was seated in the posterior wall of the uterus, its base or attachment being its broadest part, while it projected into the uterine cavity for about three quarters of a an inch. The other organs of the body were healthy. The uterus, with the cyst and the fibrous tumour, was shown to the Fellows of the Society.

A paper, by Dr. Edward John Tilt, was read

ON THE TREATMENT OF NAUSEA AND VOMITING IN UTERINE INFLAMMATION AND IN DISEASES OF MENSTRUATION.

Nausea and vomiting were said to be comparatively uncommon symptoms in uterine affections, but very distressing from the loss of strength and from the irritability and despondency which followed them. The fact of nausea and vomiting occurring so frequently in connexion with otherwise healthy menstruation and with pregnancy was considered to explain why vomiting was a symptom of diseased menstruation; and their occurrence during amenorrhœa, dysmenorrhœa, and menorrhagia, in which the body of the womb, and more particularly its lining membrane, is implicated, was given to explain why nausea and vomiting are frequent symptoms of internal metritis, whether chronic or acute; whereas it was said to be extremely rare to meet with them when the neck of the womb was alone implicated, for they neither accompanied its various kinds of ulceration nor the catarrhal inflammation of its mucous membrane, which is the most common of uterine affections. Continued nausea was represented by Dr. Tilt as much more frequent than vomiting, most troublesome in the morning, going off after breakfast or dinner, increased by worry, excitement, the fatigue of dressing or talking, and being sometimes so irksome as to cause patients to refuse taking any food unless forced to do so. Some patients only vomited once or twice in the morning, others more frequently. One only vomited at menstrual periods, and then incessantly for two or three days, with but short intervals of rest. Another thought that she vomited all her food for a year; and in one case the vomiting was continued for eight years, killing the patient at last by inanition. In most of these distressing cases there were no symptoms of biliousness, the sickness being a reflex nervous phenomenon, as in pregnancy. Dr. Tilt stated that uterine treatment, such as leeches to the womb, or the application of potassa fusa cum calce, would sometimes suddenly check the vomiting for a period; that this result cannot be depended upon; and that besides the regular treatment of the uterine affection, it was necessary to adopt some other treatment to mitigate the patient's sufferings. Even when the patient presented little signs of biliousness, Dr. Tilt advised, as a preliminary measure, a full dose of calomel, followed by alterative doses of blue-pill, to be continued for a week or ten days. This would sometimes very much diminish the vomiting and nausea; if not, the well-known minor remedies for sickness might be tried in succession. Strychnine was also mentioned as having been useful with some patients; and various interesting cases were related, showing the utility of a solution of morphine, given in effervescing draughts, and repeated after every fit of vomiting, two grains having been, however, sometimes given without quelling the sickness. Blisters to the pit of the stomach, dressed in the usual way, or with acetate of morphine, were favourably mentioned; and, as a last resource, Dr. Tilt advised an issue to the pit of the stomach, by which means he was able to check vomiting which had lasted incessantly for a year in a patient who, last winter, was only kept alive by brandy. The issue had been discharging for six months, and still continued to check the sickness, notwithstanding a severe relapse of internal metritis, which had caused this distressing symptom. In another case of chronic inflammation of the womb, vomiting seemed to relieve the still more distressing pains, so Dr. Tilt did not think himself justified in recommending the application of an issue. When nausea was protracted, he urged the necessity of forcing patients to take a few mouthfuls of food repeatedly in the course of the day, as in the sickness of pregnancy; and he advised those who suffered from morning sickness to take a little tea, milk, and rum or brandy on waking and before getting up.

A discussion followed, in which Mr. Gervis, Dr. Rogers, Dr. Tyler Smith, and Dr. Tanner took part; and Dr. Tilt having replied, the meeting adjourned until Wednesday, the 6th of February.

MEDICAL NEWS.

Apothecaries' Hall.—The under-mentioned gentlemen passed their examination in the Science and Practice of Medicine, and received Certificates to Practise on Thursday the 10th inst.:—

Batten, William Smith, Shaftesbury
Mead, Henry Thomas Harvey, Canterbury
Wollaston, Thomas Gulston, Shrewsbury.

The following gentlemen also on the same day passed their First Examination:—

Knapp, John, Middlesex Hospital
Pennington, Abel, Warrington.

DEATHS.

Chapman.—January 6, at Hawkfield, near Leith, John Chapman, jun., M.D. Mar. Coll. Aberd.; M.R.C.S. Eng.; House-Surgeon to the West Riding of Yorkshire Asylum, at Wakefield.

Day.—January 8, at Bath, Edward Elinsall Day, L.S.A. Lond. aged 65.

Gendron.—Recently, Dr. Gendron, of Chateau-du-Loir, France.

Holt.—January 10, William Holt, of Greengate, Salford, Manchester, M.R.C.S. Eng.; L.S.A. Lond., aged 58.

Houlton.—January 14, Joseph Houlton, of Blomfield-street, Paddington, M.R.C.S. Eng.; M.D. Erlangen, formerly Surgeon in the East Norfolk Militia, aged 72.

Jackson.—January 15, George Jackson, of Church-street, Spitalfields; M.R.C.S. Eng.; aged 64.

Kay.—January 12, William Kay, of Clifton, Bristol, M.D. Edin.; L.R.C.S. Edin.; aged 54.

L'Estrange.—January 14, Francis Ray L'Estrange, of King-street, Camden-town, M.R.C.S. Eng.; aged 72.

Northen.—January 11, Francis Hickin Northen, of Lea House, Eccleshall, Staffordshire, M.D., aged 59.

Plomley.—January 9, Dr. Francis Plomley, of Maidstone, Ext. L.R.C.S. Lond.; L.R.C.P.; M.R.C.S. Eng.; L.S.A. Lond.; F.L.S., aged 55. He was much and deservedly respected. His death causes a vacancy at the West Kent Infirmary and Hospital, Maidstone, to which he had been Senior-Physician for twelve years.

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TAYLOR.—January 13, Abraham Taylor, of Spur-street, Leicester-square, in practice prior to 1815; Exam. R.C.S. Eng. for R.N., aged 72.

THOMSON.—November 4, in the Camp at Pekin, suddenly, Arthur Saunders Thomson, M.D. Edin.; L.R.C.S.; Staff-Surgeon, Major in charge of the 2nd Division of the British Army in China.

THE PARIS HOSPITALS.—In the Hospitals and the Infirmaries of the Hospices of Paris there are at the present day 7877 beds devoted to the treatment of patients; viz: 5577 for Medical, and 2300 for Surgical cases. The beds in the Hospitals are thus distributed: Medical cases, 3250; Surgical cases, 1706; Accouchements, 677; Diseases of the Skin, 933; Venereal Diseases, 612; total, 7178. During 1859 there were treated in the Hospitals 90,996 cases, and in the Hospices, 5086 cases, making a total of 96,082.

NEW APPOINTMENTS AT THE PARIS HOSPITALS.—In consequence of the retirement of MM. Ricord and Guersant, and the death of M. Després, the following changes have taken place:—M. Giraldès is appointed Surgeon to the Children's Hospital; M. Follin Surgeon to the Salpetrière; M. Depaul Surgeon to the Foundling Hospital; and M. Broca Surgeon to the Bicêtre.

WHY THE UMBILICAL CORD CONTRACTS.—In a transverse section of the umbilical cord it may be observed, that the thick middle coat of the vessels is entirely composed of smooth muscular fibres, lying in immediate contact one with the other, and in such abundance as is scarcely to be seen in any completely developed vessel. This peculiarity explains the extraordinarily great contractility of the umbilical vessels, which can be so readily seen in action on a large scale when mechanical stimuli are applied, when the vessels are divided with scissors or are pinched, or after the employment of electrical stimuli. Sometimes, upon the application of external stimuli, they even contract to such a degree that their canal is entirely closed, and thus after birth, even without the application of a ligature, as when, for example, the umbilical cord has been torn asunder, the bleeding may stop of itself.—*Virchow's Cellular Pathology.*

LECTURES IN THE MEDICAL FACULTY OF THE PRAGUE UNIVERSITY FOR 1860-61.—From the following scheme of lectures to be delivered in the Prague University it will be seen that the system there established is pretty comprehensive:—Dr. Purkynè, Physiology of Vegetable Life and of the Human Economy, with Demonstrations and Experiments, and Microscopical Practice; Dr. Popelt, Theoretical and Practical Juridical Medicine, Public Hygiene, and the Treatment of Apparent Death; Dr. Jacksch, Special Pathology and Therapeutics, and Clinical Medicine; Dr. Bochdalek, Descriptive and Topographical Anatomy, with Microscopical Practice; Dr. Treitz, Pathological Anatomy, with Practical Instruction in Post-mortem Examinations; Dr. Halla, Special Pathology and Therapeutics, Clinical Medicine, and Medical Propadeutics and Casuistics; Dr. Streng, Lectures to Midwives; Dr. Seyfert, Theoretical and Practical Midwifery, Clinical Midwifery, and Juridical Midwifery; Dr. Strupi, Theoretical and Practical Veterinary Medicine, and Veterinary Police; Dr. Hasner v. Artha, Diseases of the Eye, Theoretical and Clinical; Dr. Blazina, Surgical Pathology and Therapeutics, and Clinical Surgery; Dr. Reiss, Pharmacognosis; Dr. Loschner, Pathology and Treatment of Diseases of Children, with Clinical Demonstrations; Drs. Cejka and Waller, General Pathology and Therapeutics; Dr. Lerch, Juridical Chemistry, with Practical Instruction in Chemistry; Dr. Pilz, Ophthalmological Practice; Dr. Maschka, Juridical Medical Casuistics; Drs. Böhm and Spott, Medical Gymnastics, with Demonstrations; Dr. Altschul, Theoretical and Clinical Homœopathy (!!); Dr. Köstle, Theoretical and Practical Psychiatrie; Dr. Ritter, Medical Polyklinik; Dr. Petters, Auscultation and Percussion, with Practical Instruction; Dr. Greger, Medical Physics.

HÆMATINE AS A TEST IN FORENSIC MEDICINE.—Hæmine and Hæmatine do not present as yet the slightest pathological interest; but, on the other hand, they have proved of very great importance in forensic medicine on account of their having been recently employed as one of the surest tests for the examination of blood-stains. I myself have been in a position to make experiments of this sort in forensic cases. For this purpose the best mode of proceeding is to mix dried blood in as compact a form as possible with dry, crystallized, powdered common salt, and then to add to this mixture glacial acetic acid, and evaporate at a boiling heat. When this has been done, crystals of hæmine are found where the blood-corpuscles or the substance previously lay, in which the presence of hæmatine was doubtful. This is a reaction which must be ranked among the most certain and reliable ones with which we are acquainted. There is no other substance in which we know such a transformation to take place, but hæmatine. This test is extremely important, because it is applicable in the case of extremely minute quantities, only they must not be spread over too large a surface. It would therefore not be easy of application in a case where we had to deal with a cloth which had been dipped into a thin, watery fluid coloured with blood. Yet I was able, in the case of a murdered man, on the sleeve of whose coat blood had spurted, and where some of the drops were only a line in diameter, from these minute specks to produce innumerable crystals of hæmine, though of course microscopical ones. In cases in which the ordinary chemical tests would necessarily absolutely fail on account of the smallness of the quantity, we are still able to obtain hæmine.—*Virchow's Cellular Pathology.*

VITAL STATISTICS OF LONDON.

Week ending Saturday, January 12, 1861.

BIRTHS.

Births of Boys, 959; Girls, 906; Total, 1865.
Average of 10 corresponding weeks, 1851-60, 1791·7.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	846	861	1707
Average of the ten years 1851-60	618·3	622·8	1241·1
Average corrected to increased population..	..	..	1365
Deaths of people above 90			
Deaths in 15 General Hospitals	37	51	88

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1851.	Small pox.	Measles.	Scarlatina.	Diphtheria.	Whooping-Cough.	Typhus.	Diarrhœa.
West	376,427	..	19	10	2	5	5	1
North ..	490,396	1	5	6	6	17	7	2
Central ..	393,256	..	19	1	2	22	3	1
East	485,522	3	3	5	1	7	2	3
South ..	616,635	1	10	6	6	21	7	4
Total.. ..	2,362,236	5	56	37	17	72	24	11

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	30·085 in.
Mean temperature	21·7
Highest point of thermometer	49·2
Lowest point of thermometer	10·4
Mean dew-point temperature	20·4
General direction of wind	S.E.
Whole amount of rain in the week	0·01 in.

TO CORRESPONDENTS.

Communications from Dr. Hildige, Dr. Carson, Dr. Leith Adams, Dr. Schofield, etc., are in type.

The interesting letter of our Edinburgh Correspondent is unavoidably delayed until next week.

Dr. Duigan, Gainsborough.—We do not see that good could be done by the publication of any further details of the case, as so full an account appeared in our leading article.

Berkshire shall receive a private communication if he will forward his name and address.

Mr. Hazard.—We know of no Assurance Office which provides for the relief of Professional men when disabled by sickness. Sir John Forbes and others endeavoured to establish such a Society many years ago, but without success.

Old Subscriber.—The Gluten Bread can be obtained from Messrs. Bell, Oxford-street.

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Mr. Browne's notice of the addition to the list of Expected Operations arrived after publication last week. Such notices should be at the office on Thursday morning at latest.

X. Y. Z.—Greenock. Received, and will be inserted.

Nepenthe.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Will your correspondent, Dr. Edmunds, kindly refer me to the formula for the preparation of Nepentho, which he appears to have selected from among the sedatives in the treatment of the important case reported in your Journal of January 5? I ask this question because I am unable to find any reference to this substance in the works of Pereira, Gray, or in the American books on Pharmacy. I am, &c.

13, Charleston-terrace, Rathmines, Dublin. H. DRAPER.

Excision of the Knee-Joint.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—My attention has been called by a friend to an error contained in my description of the state of the limb six years after excision of the knee-joint, published in your Journal of the 5th inst. I have there stated that the "real shortening at present is four inches, or two inches and a quarter more than it was nearly six years since." If the words were taken in their literal sense I should appear to make a somewhat absurd statement, viz., that the leg had actually so far decreased in length,—such of course is not the case, nor was this my meaning. What I intended to convey was, that the leg on the operated side was shorter than the other by four inches at present, whereas, when the measurement was taken six years since, the shortening on the operated side, as compared with the other, was only two inches and a quarter. The fact is, the sound limb has increased in its growth, and the operated limb has not kept pace with it; but is one inch and three-quarters—not two inches and a-quarter—shorter than it would have been had it grown in proportion with the other since the date of the last measurement. I am, &c.

Caroline-street, Bedford-square. HENRY SMITH.

Medical Biography.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Will you be kind enough, when space permits, to give insertion to this communication, relating to a subject which I believe to be of great interest to the Profession, viz.,—"Medical Biography." So far as I can ascertain, there is not a thoroughly first-class Dictionary of Medical Biography in existence, at least of very modern date. Such works as those of Hutchinson, however good in their day, cannot be considered anything like sufficient for the wants of the Profession at the present time. I believe that a new and tolerably complete "Dictionary of Universal Medical Biography," would be very acceptable to a large number of Medical gentlemen.

Such a work as the above might, I should think, be undertaken by the Sydenham Society, which is well adapted to that purpose, having been established for the express purpose of diffusing Medical literature. One or two volumes might be issued annually.

When we come to consider that Mr. Hutchinson's work was published so long ago as 1799, it must be allowed that many of the brightest ornaments of the Profession, in this and in other countries, have flourished since that time.

Trusting that the above suggestion may not be thrown away,

I am, &c.

H. L. MAYSMOR, M.D., F.R.C.S.E.

Springfield Lodge, Park Village East, Regent's-park.

January 14.

P.S.—Can any of your readers inform me, as to what has become of the MS. of the late Dr. Kennedy's "Medical Bibliography," which was, I believe, in the possession of the *old* Sydenham Society?

Chloroform.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I very much fear that the case in your Journal of the 12th inst. must be taken to be a death really from chloroform. I explained at Oxford that, in reality, Hospital practice shows that very small doses of chloroform, paradoxical as it may seem, are decidedly the most dangerous, and that death begins,—not in the heart, but in something like a gentle spasm, or tetanic tension of the respiratory muscles; there is no mistake at all about this fact with amylene. The point, however, I now wish to refer to is the following:—I saw two cases in Paris, operated on exceedingly like that referred to in your Journal of the 12th inst. The patients in each case were horribly frightened; each had a smashed ankle, and it was necessary to adopt a primary operation. They both dreaded the operation very much, just as the man already referred to; each was just the style of case where one would refrain from chloroform. Complete *empuisement*, which seems to signify with the French more than our word "shock,"—in fact a state made up of tendency to syncope with great intolerance of pain, collapse, and sickness; and to these we may add *quoad* chloroform, intense emotional alarm. The following manœuvre saved these patients—it may be worth keeping in mind. Emotional alarm is an intangible entity that some might disregard; but it probably was the real cause of the death in the case in your Journal of the 12th. Emotional alarm causes a tendency to syncope; if you have this decidedly pronounced syncope already, it is dangerous to give the chloroform; if you remove the emotional alarm you remove the tendency to syncope. This latter, of course, is a mental operation, and in place of bringing the patient with his crushed ankle into the operating theatre, instruments rattled and prepared, stoves lighted, students summoned, etc., the following was the plan adopted:—The patient's consent was quietly obtained to have the leg off; and, "to-morrow at twelve o'clock," was rather ostentatiously named as the time it would be done. The Surgeons pretended to go away, but suddenly said, "by the way you may as well have a little chloroform when we go away, it will get you sleep." The assistant was cautioned in a sort of heterodox Latin to be cautious of the anæsthetic, with syncope threatening, etc. The patient then, who previously resisted the chloroform, took it well. Our knowing friend, M. Roux came back in about ten minutes and took off the leg in the ward on the instant. I am, &c.

Sackville-street, January 14. CHARLES KIDD, M.D.

Chlorodyne.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Dr. Shorthouse has recently given, in your Journal, a testimonial in favour of Mr. Davenport's secret remedy, in terms of such complete approval as only to be equalled by his confidential statement attached to those advertisements, setting forth the virtues of chlorodyne, which periodically appear in the Medical Journals.

I regret that my experience should be very much opposed to that of Dr. Shorthouse; but having used the remedy in several cases, and having observed effects which I cannot describe otherwise than very terrifying, I am induced to warn my Medical brethren not to use it without a very close examination into the constitutional peculiarities of their patients.

I have never seen, but in one instance (a female of leucophlegmatic habit), any greater power over neuralgic complaints manifested by chlorodyne, than I have witnessed over and over again by morphia, hydrocyanic acid, chloroform, etc., and in using any of these last-named remedies we have the advantage of knowing what we are introducing into our patient's system. I have, however, seen the exhibition of small doses (ten minims) in cases of advanced phthisis followed by such overwhelming prostration as will effectually prevent Mr. Davenport's chlorodyne from achieving any wonderful cures in my hands. In another case, that of a lady suffering severely from "tic-douloureux," twenty minims were given: the pain was for a short time relieved, but such a distressing sensation of cerebral fulness took its place that the patient declared she would sooner suffer the misery produced by the disorder than the misery produced by the remedy. For some hours after this dose, involuntary twitches of the arms and legs were witnessed.—A strong, powerfully-built man having heard of the wonderful powers of chlorodyne, being worn out with neuralgia, took forty minims. Immediately after he had swallowed them he became unconscious and did not recover his senses for some hours, and felt thoroughly unhinged for several days, to the horror and dismay of his family.

On principle I object to anything secret, and although if I had witnessed any benefit derived from the administration of chlorodyne commensurate with the risk incurred, I should for my patients' sakes continue to prescribe it; yet when, in the large majority of instances in my experience, most alarming symptoms have been occasioned, with little or no relief rom disease, I strongly dissuade "Inquirer" from prescribing or administering the drug. I am, &c.

Gloucester, January 12. BUCHANAN WASHBOURNE, M.D.

COMMUNICATIONS have been received from:—

M. CLAUDE BERNARD; Dr. ANDERSON; Mr. LEITH ADAMS, Malta; Dr. JAGO; Mr. J. Z. LAURENCE; Mr. WILDE, Dublin; Dr. WILSON; Dr. OGLE; Mr. BRYANT; Dr. R. D. THOMSON; REGISTRAR-GENERAL; Dr. ADAMS, Banchory; Dr. WATSON, Chester; Mr. SOLOMON, Birmingham; REGISTRAR-GENERAL for SCOTLAND; Dr. WASHBOURNE; Dr. USSHER; Mr. DOVE; Dr. SMYTHE; Dr. DEVENISH; Mr. WHEATLEY; Mr. VINCENT; Mr. HAZARD, &c.

APPOINTMENTS FOR THE WEEK.

January 19. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-Cross, 1 p.m.

21. *Monday*.

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

MEDICAL SOCIETY OF LONDON, 8½ p.m. Mr. Henry Smith "On the Nature and Treatment of the more Severe Forms of Stricture of the Urethra, especially where Incision has been previously resorted to."

22. *Tuesday*.

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Professor Owen "On Fishes."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Dr. J. S. Christian "On the Restoration of Suspended Animation;" Mr. Thomas Paget (of Leicester) "On Operation for Pervious Urachus, with Stillicidium Urinæ."

23. *Wednesday*.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m. Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

24. *Thursday*.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Professor Tyndall "On Electricity."

25. *Friday*.

Operations, Westminster Ophthalmic, 1½ p.m.

ROYAL INSTITUTION, 3 p.m. Dr. G. C. Wallich "On the Nature of the Deep-Sea Bed, and the presence of Animal Life at Vast Depths in the Ocean."

EXPECTED OPERATIONS.

King's College Hospital.—The following Operations will be performed this day (Saturday) at 2 o'clock:—

Staphyloraphy (two cases); Removal of Epithelial Growth from Penis,

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WATER BEDS.—EDMISTON and SON, 5, Charing-Cross, beg to call

the particular attention of the Managers of Hospitals and Dispensaries, and the Medical Profession generally, to the prices and quality of their Hot or Cold Water Beds. The prices hitherto charged being so high as to limit the sale of such articles to the affluent, they are induced to offer them at such prices as will enable the public generally to realise the advantage and comfort to be derived from their use.

WATER BEDS, £4 4s., £5 5s., and £6 16s. 6d.

Water Pillows and Cushions, 7s. 6d. to 21s. Urinals, from 3s. 6d. to 12s. 6d. Cotton Elastic Stockings, 4s. 3d. Silk, 5s. 3d. Knee Caps, Leggings, Anklets, &c.

BED SHEETS, ACCOUCHEMENT BELTS, &c.

India-Rubber Chamber Utensils for Lunatic Asylums, 7s. 6d. each, or 75s. per dozen.

WATER BEDS ON HIRE. TERMS, 7s. 6d. PER WEEK.

LONDON: EDMISTON AND SON, 5, CHARING-CROSS, LATE 69, STRAND.

New Remedies by Savory & Moore.

Hypophosphite of Quinine; Hypophosphite of Iron; Hypophosphite of Iron and Quinine in Scales (perfectly soluble); Syrup of Hypophosphite of Iron and Quinine.
Most successfully employed in cases of Debility and Low Vitality.

Carbonate of Lithia; Hypophosphite of Lime, Soda, and Ammonia; Syrups of Phosphate of Iron, Lime, Manganese, &c. &c.

The New EYE DOUCHE, invented by SAVORY & MOORE, has elicited the approbation of the most eminent Oculists.—*Vide* the "Lancet" of March 31st.

N.B.—Inferior Instruments, pirated from the New Design, are being offered for sale as "the same as Savory and Moore's Eye Douche."

143, New Bond-street; 29, Chapel-street, Belgrave-square; and 220, Regent-street, London.

Lichen Islandicus; or, Iceland Moss

COCOA; Manufactured by DUNN & HEWETT, London.

Strongly recommended by the Faculty in all cases of Debility, Indigestion, Consumption, and all Pulmonary and Chest Diseases.

The two articles here combined are well known for their nutritive qualities. The Moss contains a large portion of nitrogen—or flesh-producing substance,—and being prepared by a very careful and peculiar process, which frees it from all the grittiness and disagreeable flavour which are always so unpleasant is rendered perfectly pure, with nothing but the beneficial parts left.

The Cocoa, containing more nutriment than most articles of food, being combined with the Moss, forms in this mixture an article of the greatest importance to the Invalid, and at the same time beneficial to the healthy and robust, restoring health where it is declining, and retaining it where already enjoyed.

Testimonial from A. H. HASSALL, Esq., M.D.

"I have carefully examined both microscopically and chemically the preparation of Iceland Moss and Cocoa made by Messrs. DUNN and HEWETT; I find it to be carefully manufactured with ingredients of the first quality.

"The Combination of Iceland Moss and Cocoa forms a valuable article of diet, suited equally for the robust and for invalids, especially those whose digestion is impaired. It is very nutritious, of easy digestibility, and it possesses moreover tonic properties."

(Signed) A. H. HASSALL, M.D.

Chlorodyne. —J. T. Davenport

begs to direct attention to the disgraceful and fraudulent practice of certain parties, who apply the term "CHLORODYNE." to compounds of THEIR OWN MANUFACTURE, WELL KNOWING that the word is applied to a remedy SOLELY DISCOVERED and INTRODUCED by Dr. J. COLLIS BROWNE, M.R.C.S.L. (late Army Medical Staff), the formula of which is confided to J. T. DAVENPORT, and NONE other;—hence the assumption of the title, claim to discovery, or manufacture of CHLORODYNE by any other persons is a direct palpable deceit and imposition.

The Medical Testimony, published on the extraordinary properties of this remedy, is exclusively applied to

DR. J. COLLIS BROWNE'S CHLORODYNE.

WHOLESALE DEPÔT—33, Great Russell-street, Bloomsbury-square, London.

Varicose Veins and Supporting Bands.

—SURGICAL ELASTIC STOCKINGS AND KNEE CAPS, previous, light in texture, and inexpensive, yielding an efficient and unvarying support, without the trouble of lacing. Likewise, a strong low-priced article for Hospitals and the Working-Classes. ABDOMINAL SUPPORTING BANDS for both Sexes; those for Ladies' use, before and after accouchement, are admirably adapted for giving adequate support with extreme lightness—a point little attended to in the comparatively clumsy contrivances and fabrics hitherto employed. Instruction for measurement and prices on application, and the articles sent by post from the Manufacturers and Inventors, POPE and PLANTE, 4, Waterloo-place, Pall-mall, London, S.W.

The Profession, Trade, and Hospitals, supplied.

To Physicians, Surgeons, and

DRUGGISTS.—BROWN'S CANTHARIDINE BLISTERING TISSUE, prepared from pure Cantharidine. An elegant preparation, vesicating in much less time than the Emp. Lyttæ, P.L., easily applied and removed, and will not produce strangury, or troublesome after-sores. It has received the sanction and commendation of many of the most eminent Practitioners in the Kingdom. In Tin Cases, containing ten feet, 6s. 6d.; and small Cases of five square feet, 3s. 6d. each.

BROWN'S TISSUE DRESSING, an elegant, economical and cleanly substitute for all ointments as a dressing for Blisters, and may be called a companion to the above. In Tin Cases, containing twelve square feet, 1s. 6d. each.

EXTRACTS AND EDITORIAL NOTE FROM THE "NEW YORK JOURNAL OF MEDICINE."

"March 1, 1850.

"BROWN'S CANTHARIDINE TISSUE.—It presents peculiar claims to our notice in the inflammatory diseases of females and children, in whom the unpleasant consequences which so often follow the application of the Emp. Cantharides are most apt to occur. We have found it a reliable and peculiarly safe vesicant, and from the many trials we have given it, we are satisfied that it deserves the attention of the Medical Profession.

"Accompanying this article is a very simple and neat dressing."

"I have prescribed the Cantharidine Tissue and Dressing (as prepared by you), for the last ten years. I have much satisfaction in bearing testimony to its effectual, mild, and safe action as a vesicant on the most delicate skin, and one of the best auxiliaries in the successful treatment of congestive and inflammatory diseases; the dressing has the advantage of being cleanly, agreeable and curative in its application.

"JOHN PURSELL, M.D., F.R.C.S.E.

"Kennington Park, Surrey, February 12, 1857.

"To Mr. T. B. Brown."

"Army Medical Department, January 16, 1847.

"The Principal Medical Officer of the General Hospital, Fort Pitt, Chatham, reports that Mr. Brown's Blistering Tissue has been used extensively in the Military Hospital, has been found effective as a vesicatory, when carefully applied, and has not been productive of any degree of strangury. "ANDREW SMITH, M.D.

"Deputy Inspector-General of Hospitals.

"Mr. T. B. Brown, Birmingham."

Sold by the Sole Consignees, WILLIAM BAILEY & SON, Horseley Fields Chemical Works, Wolverhampton; and by all Wholesale and Retail Druggists and Medicine Agents throughout the British Empire.

Hogg's Lithia Water, Super-

CARBONATED.—LITHIA with POTASH and LITHIA with AMMONIA.

HOGG'S Citrate of Potash, and Citrate of Potash and Iron Waters.

HOGG'S Protocarbonate of Iron Water, and Ammonio-Phosphate of Iron Water.

These Waters are prepared as prescribed by Drs. Garrod, Owen Rees, and Bird; they are strongly effervescent, very agreeable, and contain an ordinary dose of their respective ingredients.

Also Potash Water, containing 20 grs. of the Bicarbonate; Soda Water, 15 grs.; Seltzer, Vichy, and Pullna, from correct analyses.

HOGG, Pharmaceutical Chemist to the Queen, 9, Albion-pl., Hyde-park-sq.

Aerated Lithia Water. — Messrs.

BLAKE, SANDFORD, and BLAKE are prepared to supply the LITHIA WATERS (of which they were the original manufacturers under Dr. GARROD'S instruction) of any strength prescribed by the Profession for special cases. Those in constant use contain 2 grains and 5 grains in each bottle, either by itself, or combined with BICARBONATE of POTASH or PHOSPHATE of AMMONIA.

The following Waters as usual:—Potash, containing 18 grains of the Bicarbonate in each bottle; Citrate of Potash, 30 grains; Soda, 15 grains; Ammonia, 10 grains; Seltzer and Vichy from their respective analyses; and a very delicious, as well as useful, MINERAL ACID WATER.

BLAKE, SANDFORD & BLAKE, Pharmaceutical Chemists, 47, Piccadilly.

A. Silverlock's Medical Label Ware-

HOUSE, Letter-Press, Copper-plate, and Lithographic Printing Offices, Wardrobe-terrace, Doctors'-commons, London, E.C.

H. SILVERLOCK'S stock of Labels for Dispensing purposes having been recently revised and enlarged, now consists of upwards of 800 different kinds. Yellow and Green Labels for Drug Bottles, Drawers, &c., at per book or dozen: a Book, containing a selection in general use in Surgeries or Dispensaries, 10s. 6d. Priced Catalogues of the above may be had, post free, on application. Printing of every Description at Moderate Prices

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ORIGINAL LECTURES.

LECTURES
ON
THE SPINAL CORD,
DELIVERED AT
The College of France,
DURING THE SUMMER SESSION 1860,

By M. CLAUDE BERNARD,
Member of the French Institute; Professor of General Physiology at the Faculty of Sciences, &c.

LECTURE IV.

ON THE MODIFICATIONS WHICH TAKE PLACE IN DIVIDED NERVES; AND ON THE INTRINSIC PROPERTIES OF THE SPINAL CORD.

Summary: Modifications which arise in the Extremities of the Spinal Roots, when they have been divided—Nerves which have been too severely Bruised, or otherwise Disorganized, are not Reproduced—When the Section has been operated with a sharp Instrument, the Results obtained are entirely different—Motor and Sensitive Nerves not affected by the Operation in the same Manner—In the Motor Roots, the Central Portion continues to live, and its Extremity grows out into a little, uniform Tumour, while the Peripheral Portion of the Nerve decays—In the Sensitive Roots the Reverse takes place—Coincidence of these Remarks with the Facts noted in Clinical Observations—Effects of Amputations upon the Terminal Extremities of the Nerves—Waller's Experiments—Results of the Section of Mixed Nerves—The Nerve heals after a Certain Lapse of Time, and resumes its usual Functions—Effects produced by the Division of the Fifth Pair in Cases of Facial Neuralgia—Regeneration of lost Tissue—Intrinsic Properties of the Spinal Cord—This Central Axis, formerly viewed by Anatomists as the Agglomeration of the Nervous Fibres, contained in the Spinal Roots—This Notion is a mere extension of the Views entertained by Sir Charles Bell—Is founded on erroneous Principles—The Brain, Spinal Cord, and Peripheral Nerves are now known to be distinct Organs, and not separate Portions of the same Apparatus—Intrinsic Sensibility of the Spinal Cord—Van Deli's Experiments—The Spinal Cord taken in itself is insensible—Its Apparent Sensibility derived from the Posterior Roots—The Peripheral Nerves appear alone to be capable of Perceiving External Impressions—The Spinal Cord is exclusively reserved for the Perception of Nervous Vibrations—The Properties of the Optic Nerve compared with those of the Spinal Axis—Magendie's Experiments on the Retina—Experiments on Recurrent Sensibility—Effects produced by the Section of the Great Sciatic Nerve—Conclusions to be drawn from this Experiment.

GENTLEMEN,—The recurrent sensibility of motor nerves,—that singular property, which invests them with powers of sensation almost as vivid as those enjoyed by the posterior roots themselves,—has now been fully discussed; and the corresponding experiments have been performed in your presence. You have witnessed the immediate results of a transverse section of the spinal roots; it now remains for us to consider the modifications which arise in the truncated extremities of the divided nerves—a subject of solemn importance to the physiologist, as well as to the practical observer.

When the nervous trunks have been completely mangled with the forceps, or otherwise disorganised, a total atrophy is the consequence; but such is not the case when they have merely been cut through with a sharp instrument; we then see one of their extremities grow thicker, and remain permanently tumefied, while the opposite extremity is gradually atrophied, and disappears altogether at last. But a singular difference is found to exist, in this respect, between the two orders of nerves: in the motor roots, the central extremity is that which continues to receive the vital stimulus; while, in the sensitive roots, the reverse takes place; the peripheric extremity of the divided nerve is enlarged, while its central portion is totally atrophied, up to its primitive origin within the depths of the spinal cord. The results of clinical observation agree with these facts: for in patients who die shortly after undergoing an amputation, the autopsy reveals a similar change in the terminal portions of the cut nerves. In certain cases, the patient having survived the operation, the post-mortem examination takes place several years after the event, and the modifications then ascertained to exist may be viewed as changes of a permanent nature; now, the nerves are always found, in such cases, to end in a small ovoid tumour, which probably results from the enlargement of the motor fibres; for when a compound nerve is divided and left to itself, both extremities are in this manner hypertrophied; the motor fibres concur in the development of the central portion, and the sensitive fibres in that of the peripheral extremity. Some authors, however, are of opinion that the neurilemma is in both cases the real source of this peculiar enlargement.

The interesting experiments of M. Waller are in perfect concordance with our own views; for, after having divided in the cervical region, the sensitive and motor roots of several pairs, this gentleman examined them under the microscope, and was enabled to ascertain that twenty-four hours after the operation, the posterior roots were already become opaque, and exhibited a granular appearance, offering in short, exactly the same alterations as after death; the atrophied nerve, in fact, gradually decays from mere want of nutrition.

Nor is it less interesting to examine the changes which occur in compound nerves, when they have been divided; it is a well-known fact that in man, as well as in the lower animals, the paralysis which results from the section of a nerve is only transitory, and that sensibility and the power of voluntary motion are gradually restored to the injured parts. When, for instance, the fifth pair has been divided in patients suffering from facial neuralgia, a temporary cure is effected: but after a short lapse of time, the nerve heals again, and recovers its former properties, as the reappearance of lancinating pains too well evinces. In all such cases a partial atrophy of the nerve at first takes place: its elements are then reproduced, after passing through all the successive stages of embryotic development: a fact which the labours of modern micrographers have now proved beyond the possibility of a doubt.

But when the nervous roots themselves—not the compound nerves which result from this junction—have become the seat of Surgical injury, it may well be doubted whether a similar reproduction is possible. The numerous experiments which we have repeated in dogs enable us, however, to answer in the affirmative. Sensation and motion both return in the paralyzed regions, even after a considerable loss of substance has been sustained; and the operation frequently performed on the fifth pair affords an additional proof of this. In order to prevent the extremities of the nerve from uniting again, the Surgeon frequently removes a large portion of the diseased trunk, yet the subsequent insensibility disappears after a certain time—a proof that sensitive, as well as motor or compound nerves, enjoy the property of regenerating lost tissue.

We must now pass to a different subject; the intrinsic properties of the spinal cord, as distinguished from its physiological functions, equally deserve a share of our attention. The time is not distant when anatomists were unanimous in proclaiming this central axis to be a mere agglomeration of nervous fibres; and, in order to reconcile this opinion with facts, various attempts were made to calculate the respective bulk of the spinal cord, in its principal regions, and that of the nervous pairs which spring from or return towards it; but the dimensions of the former being vastly inferior to the sum representing the total amount of the latter, it was suggested that the difference was probably compensated by the absence of the neurilemma, in the fibres contained in the central portion of the system,—a protective envelope being of course rendered unnecessary by the powerful means which Nature has adopted to insure the security of the spinal cord. The direction of these fibres within the cerebral substance itself became a subject of inquiry; and a variety of contradictory opinions were as usual brought forward on this subject. The doctrine on which all these notions rest, and which consists in believing the nervous fibres to be continuous from one end of the system to the other, was merely an extension of the views entertained by Sir Charles Bell himself. We have already shown you that this eminent anatomist divided the nerves into three great classes,—sensitive, motor, and respiratory; the latter representing, of course, the nerves which preside over involuntary motion; in fact, the type of this latter class, as selected by Sir Charles Bell, was that branch of the third pair which regulates the involuntary contractions of the pupil. The efforts of our contemporaries were therefore mainly directed towards the precise determination of the cerebral origin to be assigned to these different kinds of nerves, but more especially those belonging to the two first classes.

The vivid light which recent discoveries have thrown upon

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the structure and properties of the nervous system has entirely dispelled these erroneous interpretations of anatomical facts. The brain, the spinal cord, and the peripheral ramifications which connect them with the surface of the body, are no longer considered as successive portions of the same great apparatus, but as organs totally distinct from each other; and, notwithstanding the juxtaposition of these different parts, their fibres are no longer held to be continuous.

These premises being laid down, let us proceed to examine the properties of the spinal cord with reference to the faculty of perceiving impressions from without. That physiologists should differ in their views on this subject, will certainly not astonish you: have we not seen how different the results of the same experiment may prove to be, when the conditions in which it is performed by various observers do not happen to be identical? The controversy which formerly arose with respect to recurrent sensibility affords a notable instance of this.

An experiment which, considering the novelty of its results, may fairly be viewed as one of fundamental importance, is due to M. Van Dell. The spinal cord being laid bare in a considerable portion of its extent, is found to enjoy a high degree of sensibility in its various parts, more especially so in its posterior tracts; provided always that proper precautions have been taken not to exhaust the animal's strength. Let the posterior roots now be divided within certain limits: the corresponding region of the spinal cord will be found to be totally insensible; while the power of sensation persists in its remaining parts, which have not been deprived of their sensitive nerves. The conclusion which evidently results from this decisive trial is, that the sensibility of the spinal cord is exclusively derived from the minute ramifications which it receives from the posterior roots.

The ingenious author of this experiment believes the peripheral nerves, which arise from the cells contained within the spinal cord, to be alone endowed with the property of receiving impressions from external stimuli: while the central axis exclusively perceives the phenomena of nervous action; in other words, although cold, heat, electricity, and other external agents produce marked effects upon the peripheral nerves, the spinal marrow remains indifferent to their action, but is highly excitable, when its own proper stimulus is applied; the impressions which it perceives are in every case the result of nervous vibrations (if we may be allowed to use the expression). In this manner alone does it perceive outward impressions, and transmit them to the encephalic mass; and it may in this respect not unaptly be compared to nerves endowed with a special sense. Allow us, for instance, to remind you of Magendie's experiments on the retina: he destroyed it in animals, without provoking the slightest manifestation of pain: he pricked it twice in the human subject in the course of an operation for cataract, without the patient's perceiving the experiment of which he unconsciously became the subject. The sensation produced by the division of the optic nerve, in cases of total extirpation of the eyeball, is that of intense light; but the patient feels no pain. The retina, the optic nerve, are instances of highly sensitive organs, which remain indifferent to the action of ordinary stimuli; light alone exerts a powerful action over them. Entirely similar to these are the special properties of the spinal cord: external agents, when they come in contact with it, do not arouse its dormant powers; it is only capable of receiving second-hand impressions, so to speak.

We shall therefore start in future from this principle,—that the nerves are organs which extend from the surface of the body to the central parts of the system, and go no further; and that the spinal cord, as well as the brain, is endowed with properties entirely different from those of the nerves implanted upon it.

We are now going, Gentlemen, to repeat the experiments connected with recurrent sensibility: the animal now brought forward is of a stouter make than the dog on which the experiment was performed the other day; and being less exhausted by the operation, it will probably exhibit a higher degree of sensibility. Allow me to draw your attention to the fact that it stands upright without difficulty, and has been able to walk in without assistance: now, if the vertebral canal had been opened in a considerable portion of its extent, such exertion could not evidently have been expected from the subject: you are thus enabled to judge for yourselves whether our method of operating is not preferable to the former process.

[The experiment is then performed as before. The animal's sensibility is so vivid as to elicit loud cries when the anterior roots are slightly twitched, by means of the thread passed under them; when directly excited they appear almost as sensible as the posterior ones. After going through the experiment in the usual manner, one of the two nervous pairs which had been prepared, having been sacrificed, the sciatic nerve is laid bare: the corresponding anterior root is cut through, and the phenomena of recurrent sensibility are found to exist in the peripheric extremity of the motor root. A considerable fragment of the sciatic nerve being then removed, below the point where it escapes from the pelvis, the peripheric extremity of the motor nerve is again excited, and the animal again evinces an acute sensation of pain.]

This experiment tends to prove, Gentlemen, as we stated previously, that the anterior roots of the lumbar and sacral pairs do not entirely derive their sensitive fibres from the surface of the body, as has been generally supposed; for, in this case, after dividing the sciatic nerve, we should no longer meet with this property. It seems, therefore, highly probable that the hypogastric plexus provides them with a few recurrent fibres. When the posterior roots of these pairs have been divided, all sensibility vanishes at once in the corresponding motor nerves.

ORIGINAL COMMUNICATIONS.

ARMY MEDICAL REPORTS.

No. XXXVIII.

ANEURISM OF THE LEFT POPLITEAL ARTERY CURED IN SIXTY-EIGHT HOURS, BY COMPRESSION AND FLEXION.

By A. LEITH ADAMS, M.B.
Surgeon to the 22nd Regiment.

Private E. M., aged 38, service 20 years, during which he was almost constantly employed in the tailor's shop,—of spare habit and delicate appearance, long subject to attacks of indigestion and general debility. About August 20, 1860, his attention was directed to "a stiffness and an uneasy feeling in the left ham whenever he rose from the cross-legged position," and shortly afterwards, (September 4,) he observed "a swelling" in the same situation. I then discovered a hard, somewhat elastic and pulsating tumour in the left popliteal space; it was oblong, and about the size of a turkey's egg, and evidently for the most part solidified, as compression of the femoral artery did not diminish its size, although the pulsation was thereby completely arrested. The bruit was strong and loud around the knee-joint, and almost to the origin of the profunda. Bags of ice were applied during the day until 10 a.m. on the 5th, but they did not seem to produce any effect on the aneurism; in consequence, Carte's compressor was adjusted on the femoral artery alternately at the groin and Scarpa's triangle. The patient was taught to make manual compression at intervals during day and night. The serious nature of the disease was likewise explained to him, and sanguine hopes of recovery held forth, provided he bore the treatment with patience and rendered every assistance in his power.

There was no change in the tumour on the morning of the 6th; moreover, he had passed a sleepless night from pain occasioned by the pressure of the instrument.

On flexing the leg, I found the bruit became almost inaudible; accordingly the leg was retained in the bent position by bandages, while continuous compression was kept up by means of the instrument, the patient, or relays of convalescents.

A full dose of morphia enabled him to bear the instrument all night, but at 6 a.m. on the 7th the aneurism was found unchanged, when, in addition to Carte's compressor, I applied the clamp tourniquet used by Dr. Dartnell, Inspector-General of Hospitals, placing one instrument on the groin, and the

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other on the triangle, and preserving the limb in the same position as on the previous day. At 5 p.m. the patient stated that "the feeling of fulness about the joint" had disappeared since noon, but on removing the compressor pulsation was still perceptible in the aneurism; the bruit, however, was not nearly so loud and extensive. Accordingly, the treatment was resumed; a pill of two grains of morphia was given at bed-time, and he slept soundly with both tourniquets pressing strongly on the vessel until 6 a.m. on the 8th. I removed the instruments and extended the limb, when the aneurism was found completely consolidated and much diminished in size, and no bruit or pulsation audible. The parts were retained in their former position until bed-time, when both compression and flexion were discontinued.

The collateral circulation was established without any perceptible change in the temperature of the limb.

On the 10th a large vessel, possibly the anastomosing branch of the femoral, was felt pulsating strongly on the inner side of the joint.

On the 18th he left the Hospital, for duty, cured; the tumour was then rapidly disappearing, and at the end of three months was absorbed.

Cases like the above speak for themselves. I have only to remark, with reference to the degree of compression, that, as a general rule, the pressure was sufficient to arrest the flow of blood in the aneurism, yet at times (when the pads of the instruments were causing pain) the force was relaxed, so that the current, although retarded, was not completely arrested.

The successful issue was doubtless attributable, in a great measure, to the endurance evinced by the patient throughout, and the morphia, which enabled him to withstand continuous compression of the artery. From the good effects of flexion in this instance I have no hesitation in recommending a like proceeding in similar cases.

Malta.

CASE OF SNOW-BLINDNESS.

By JAMES G. HILDIGE, M.D., F.R.C.S.

The form of blindness to which I am about to direct the reader's attention, presents itself so rarely to the Ophthalmic Surgeon in these countries, that I am induced to make some remarks on the following case, which has recently been under my treatment:—

Lieutenant H., formerly of the 45th Regiment, consulted me a few weeks ago, complaining of the following symptoms:—While on a visit with a friend in the country, during the recent snow, he had passed several hours of four days consecutively, in the open air, shooting. On the evening of the fourth day he remarked that everything appeared to be in movement before him, and this phenomenon was accompanied by extreme intolerance of light. Two days later the state of things increased to a great extent, and at length he could not discern any object distinctly during daylight, but when it commenced to grow dark his vision slightly improved. He stated that he had always had weak eyes, and frequently when on march in the open country had felt more or less dazzled, but never to such an extent as at present. The eyelashes were very short, and few in number; the eyeball was prominent, iris of a greyish colour, and pupil much contracted; there was, however, no injection of the conjunctiva, nor any appearance of inflammation present. It was with the greatest possible difficulty I could obtain a view of the optic papillæ and retinæ (with Jäger's ophthalmoscope in the upright image): these, however, did not present a single abnormal appearance. His general health was good. The only treatment I recommended was confinement in a darkened room during the day, and total abstinence from all stimulants, which completely relieved the symptoms in ten days.

Light reflected from white or flat surfaces is, as is well known, exceedingly prejudicial to sight. The inhabitants of northern countries are frequently affected with snow-blindness, which generally attacks them in the spring months, when sunlight has a more powerful action on the eyes than at other times of the year. The Esquimaux and Laplanders, therefore, in order to protect themselves from this affection, wear horn spectacles with a horizontal slit in their centre, which effectually protect them from the rays of light reflected from below. Persons travelling on the barren sand-steppes of the South, or where lime-rocks abound, also suffer, but in a less degree, from day-blindness. To protect the eyes in such cases the wearing of blue spectacles is sufficient, as they do not cause a dilatation of the pupil without rendering the object less brilliant, and protecting the eye at the same time from the light, not only from above, but, what is of much greater importance, from the side also (a).

During the last war between Sardinia and France (1793), several regiments were obliged to encamp on Mount Cenis and the Little St. Bernard. Whole companies became affected with nyctalopia, which was universally attributed to the reflection of the light from the dazzingly-white snow. Du Villards (père), who examined most of the soldiers affected, found an extraordinary degree of Myosis present, which, in some cases, remained, interfering very much with vision.

At some of the Eye Hospitals in Austria and Bavaria, the disease is treated by the internal employment of calf's liver—about half-a-pound being eaten morning and evening by the patient. I presume it is when the disease arises from a scorbutic taint, that the remedy is attended with the salutary effects which I have frequently witnessed. My friend, Professor Arlt, of Vienna, seems to think, however, that the improvement in vision results more from confinement in the somewhat darkened ward, than from any therapeutic effect of the above remedy.

I may mention, *en passant*, that some years ago, while travelling in South America, near the river La Plata, I met with several cases of what is called by sailors in that part of the world "moon-blindness," as they trace its cause to the moon's rays falling on a person's face during sleep. It almost always yielded (when recent) to the application of leeches to the temples. I had no opportunity of making an ophthalmoscopic examination, the ophthalmoscope not being then so generally employed as it is at present.

Dublin.

AN EXPERIMENTAL INQUIRY INTO THE VALUE OF INCISION OF THE CILIARY MUSCLE,

IN THE TREATMENT OF CERTAIN DISEASES OF THE EYE AND DISORDERS OF ITS ACCOMMODATION.

By JAMES VOSE SOLOMON, F.R.C.S.
Surgeon to the Birmingham and Midland Eye Institution.

(Continued from page 65.)

Intra-ocular myotomy relaxes the choroid to the extent the fibres of the ciliary muscle which are inserted into it are divided or paralysed by the incision.

The treatment of near-sightedness, by the operation which I have suggested, is founded on the well-known power of belladonna when applied to the eye, to paralyse the ciliary muscle, and impair accommodation for near and small objects (b).

Case 1.—*Near-sightedness from Childhood—Chronic Congestion of the Choroid and Retina of Four Years' duration—Operation—Cure of the Congestion and large Increase of Accommodation.*

On March 21, 1860, W. T——, aged 20, a teetotaler, engaged at Wednesfield, Staffordshire, as a puddler, came under my care at the Birmingham and Midland Eye Institution on account of short-sightedness which had existed from childhood, and of impaired vision. His general health was good, indeed somewhat inclined to plethoria. Two of his sisters are near-sighted. Four years ago he undertook that part in the manufacture of iron which is called puddling. In this process the eyes are exposed to the

(a) *Vide* Arlt, "Uber die Pflege der Augen im gesunden und kranken Zustande."

(b) It is scarcely necessary to state that the presence of the iris is not essential for perfect accommodation. This has been proved, both where the membrane has been congenitally absent, and where it has been removed by operation. In speaking of the anatomy of the ciliary muscle I omitted to state that Arlt has specially pointed out that there is no *continuance* whatever between the muscular fibres of the iris and those of the ciliary muscle.

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glare and intense heat of the metal in a state of fusion. He had been warned at the outset by his fellow workmen that the work would prove injurious to the sight. This advice was disregarded, the myopia increased and he became affected with congestion of the choroid and retina, as was evidenced by the appearance of red rings around the flame of a candle, and after a little while of fiery sparks when he was in the dark. The patient consequently continued at puddling one winter only. For the last two or three years he has been affected, in addition to the preceding symptoms, with almost constant frontal headaches, a common symptom of choroido-retinal congestion.

Appearance of the Eyes.—The globes, which are not unduly tense, are rather small, as are also the cornea and anterior chambers. The cornea are not much convexed. The irides are bluish-grey; the free margin of each pupil is slightly drawn towards the lens and the remainder of the iris is rather arched forwards, except at its ciliary attachment. An occasional and slight frown, with narrowing of the lid apertures, gives to the countenance that appearance of semi-distress, which is not unfrequent with short-sighted persons.

Adjusting Power.—He reads half-inch type at four inches; "small pica leaded" cannot be made out at any distance; large and distant objects are also misty.

Operation.—On March 30, 1860, I separated (by intra-ocular myotomy) some of the fibres of the ciliary muscle of each eye from their anterior attachments to the extent of about two lines (one-sixth of an inch) or rather less. The incisions were attended by a large gush of aqueous humour. In the left eye the lowest part of the circle was selected, in the right the inner and lowest portion. The iris was somewhat prolapsed in each instance, and a permanent though slight distortion of the pupil has resulted. The displacement was not sufficient to account for the improvement which took place on the theory of a less convex part of the lens receiving the rays of light, or on that of increased exosmose. The repetition of this accident I have avoided in my other cases by holding the instrument steadily in the wound until the aqueous had ceased to flow, and by reducing with one of Anel's fine probes any portion of the iris that may happen to protrude. A large gush of aqueous attended each incision.

On April 8, half-inch type was read at eight inches; and on the 27th "small pica, leaded," at five inches, and half-inch letters at sixteen. The outlines of the works at which he had been employed, a distance of a mile and a-half from his house, were now distinguished, whereas before the operation they were lost in mist.

June 19.—The power of accommodation was increasing: the works were seen at a quarter-of-a-mile further than at last report. The photopsy and frontal headache have not recurred since the operation.

July 28.—Reads minion type at five inches. The improvement noted in June and July was maintained until the end of September, when impaired vision manifested itself in the left eye, and after a time affected also the right. The patient referred this relapse to his employment, which consists in the lifting of heavy iron pigs. In the act of stooping he suffers from congestion of the head and eyes. I have not been able to prevail upon him to leave his work, or to submit to treatment. A brother, who is not short-sighted, but of the same square build and full habit as the patient, has recently been under my care for amaurotic symptoms, from which it may be inferred there is a family tendency to posterior internal ophthalmic disease.

That the subsidence of the choroido-retinal congestion in the preceding case was not due to the loss of aqueous humour, and that intra-ocular myotomy is capable of restoring normal accommodation to a myopic eye, are proved by the following case:—

Case 2.—Short Sight, with Congestion of the Choroid and Retina—Intra-ocular Myotomy—Cure.

William A., 11, a boat-boy, has been short-sighted for the last seven years. He says, every spring it becomes still more short, "in the winter it is pretty tidy." He "likes to be in the fresh air, because it freshens his eyes;" in hot weather—June, July, and August—a shade comes before them, and red lights (photopsy) are sometimes present when he is in the dark. Gentle pressure on the lids produces a red and blue light on the temporal side of the face (phosphenes?).

The globes are rather large; irides blue; anterior aqueous chambers full; no conicity of the cornea; distinct vision of small pica at six inches, and of features at twelve yards only.

May 29, 1860.—Intra-ocular myotomy was performed behind the corneo-sclerotic union, through the true sclerotic, without a discharge of aqueous humour.

June 11.—Reads with ease small pica at forty-three inches; recognises features at thirty-six yards. The unoperated eye, which used to be the best, is now nearly as good as the other.

July 28.—Sees features at a still greater distance; no symptoms of ocular congestion.

October 15.—Believes he can see as far as other boys. "Can see a great way now." The reading distance is maintained.

A slight strabismus convergens affected the left eye for six or eight weeks after the operation, attended, apparently, by retinal irritation. It subsided spontaneously.

December 12.—The patient's accommodation is now normal. He can distinguish objects quite as far off, and as clearly, as I can, my accommodation being natural.

If the margin of the pupil of one eye is extended to the rim of the cornea by iriddesis, the vision is less perfect, and the accommodation more limited than in the other in which intra-ocular myotomy has been performed. (*Cases* 3 *and* 6)

Case 3.—Short Sight—Iriddesis of the Right, and Intra-ocular Myotomy of the Left Eye.

Martha E., healthy, 8 years of age, short sightedness noticed during the last twelve months. Concave glasses afford the usual relief.

Irides brown; corneæ much arched; dimensions of the anterior chambers large, especially in their antero-posterior diameter.

The corneæ examined by the ophthalmoscope do not present cones. Reads small pica at four inches; recognises her father at twenty yards.

Medical treatment was employed from January to April 24, 1860; it included steel drops internally, and belladonna (solution ℥j. to ʒj.) to the eyes.

Operation.—April 24, 1860.—Displaced the right pupil downwards and inwards, and tied it. (Iriddesis.) On the left eye, which is not so good as the other, I performed intra-ocular myotomy.

May 11.—The power of adjustment of the eyes, for near and distant objects, is doubled.

18.—The eye on which iriddesis was performed, and which used to be the strongest, is now sooner fatigued by reading than its fellow, and the accommodation is not quite so great. The ability to distinguish distant objects is steadily increasing.

June 19.—She is reported as able to recognise her brother, a boy of eleven or twelve, at seventy yards. Her father measured the distance so as to put the matter beyond dispute. The improved accommodation has been steadily maintained.

Intra-ocular myotomy invigorates the retina and cures some forms of congenital impairment of sight accompanied by myopia.

Case 4.—Amblyopic Myopia—Cure.

On the same day, April 24, I operated upon the right eye of Ellen F., aged 12, from Tipton, complexion naturally pale, moderately good health. She has been observed "to screw her lids and to place objects very close to her eyes, since childhood." In fixing the eyes on an object she knits her brow.

Appearance of Eyes.—Anterior chambers small; cornea not much arched; globes not prominent; irides bluish-grey; not convexed; papillary margins not retracted; the pupils are more dilated than natural. On exertion the eyes sometimes water. She cannot see to thread a needle or to sew. The right eye is the worse, no kind of spectacles afford relief. Reads minion type at five inches, and recognises features not further than across the street. Medical treatment, which was continued for two months, comprised cod-liver-oil and steel.

Operation.—On the right or worst eye intra-ocular myotomy was performed on April 24, 1860.

April 27.—Reading distance with operated eye, doubled; companion eye, not improved.

June 5.—With operated eye, she can see to thread a needle and to sew; the other is not improved, and she is desirous therefore of having the operation done upon it. Can see persons at 60 or 70 yards.

June 23.—Reads minion type at 12 inches with either eye

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but cannot thread a needle or sew with the left. This is the second case in which the unoperated eye has gained through consensual action an increased power of adjustment by the intra-ocular myotomy.

August 28.—With the left eye which was operated upon, she can now thread a needle; read with distinctness brevier type No. 4, at 14 inches; it can be read further off, but not with distinctness.

In cases of extreme shortsightedness, intra-ocular myotomy restores the accommodation for the distinct vision of human features to the normal standard. Cases 5 and 8.

Case 5.—Congenital Myopia—Accommodation of Eyes for distinct Vision of Features increased by Operation from Three Yards to Twenty-seven.

J. B——, a silver-plater, aged 45, has been short-sighted since childhood.

The eyeballs are large and prominent; the chambers small; the corneæ well arched; the irides hazel; pupils active. In consequence of the imperfection of his vision, he did not learn to read until he had attained his sixteenth year, and then through double concave glasses of 18 or 20 inches focus (English). When he came under my care he was wearing No. 16 double concave. Without spectacles he read small-pica with the page almost touching his nose, which was short and turned up; the distinct vision of features was nine feet only.

Intra-ocular myotomy was performed on May 8, 1860. The reading distance was not increased more than an inch or an inch and a-half, but the adjustment for distant objects and features was augmented in a remarkable degree. By the middle of May features were distinguished at seventeen yards; and when last seen, in August, at twenty-seven yards. On June 20 his attention was directed by a fellow-patient to a chimney at sixty yards' distance, and he was asked if he saw anything on it. He replied, "Yes, there is a pigeon,—it is walking round the chimney; and I should say it is black, but I am not sure." The pigeon was blue; but in all other respects the man was correct.

The improvement in this case was in a striking manner gradual; but, for the sake of brevity, the steps are omitted.

(To be continued.)

THE UTRECHT SCHOOL OF OPHTHALMIC SURGERY.

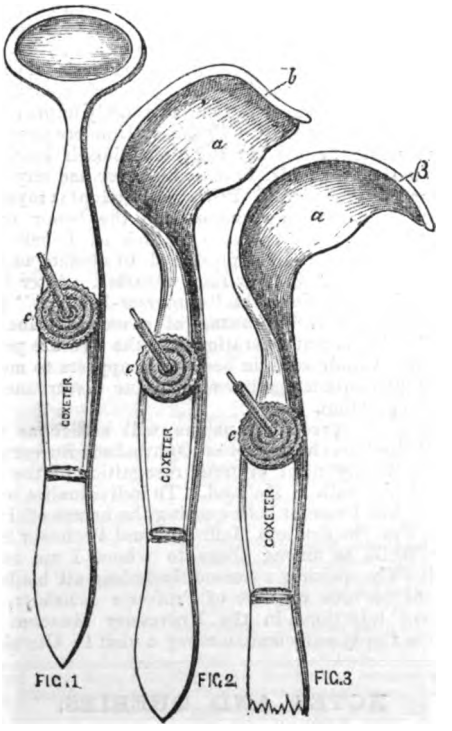
By J. ZACHARIAH LAURENCE, F.R.C.S., M.B.
Surgeon to the South London Ophthalmic Hospital.

(Concluded from page 635.)

I shall now conclude by noticing some isolated points of practice worthy of attention.

1. *Method of Applying Eye-drops.*—If we take the trouble to evert both eyelids in the general run of ophthalmiæ met with in practice, we shall feel surprised at the large proportion of cases in which the *palpebral conjunctiva* is the chief seat of the inflammation. Having satisfied ourselves of this fact, the necessary inference is that, if we wish to cure the inflammation, our applications should be directed to the structure primarily affected. Patients are generally told to let the drops "run into the eye;" that, "if they merely go outside the eye, they will do no good." To this latter statement might very reasonably be added, "and will do no harm"—a qualification which does not apply to the former direction. In truth, the contact of irritant eye-waters with the sclerotic and cornea is more frequently calculated to do harm than good. *The Surgeon should always apply his eye-waters himself;* evert both eyelids, taking care not to separate their edges too widely (otherwise the sclerotic and cornea will be injuriously exposed), then allow a drop or two of the collyrium to flow along the thumb-nail, from a camel's hair-brush, down on to the palpebral conjunctiva. Thus all chance of contagion is avoided. After a few seconds wash the residue of the eye-water carefully off with a second large brush dipped into warm water. The eye-waters I employ are argent. nitrat. (grs. x. and iv. ad. ℥j.), with or without atropine (grs. iv. ad. ℥j.). This latter collyrium will be found of signal service in scrofulous ophthalmia, and other inflammations associated with great irritability of the eye. Dr. Snellen was the first to introduce turpentine (pure or diluted with equal parts of olive-oil) as an application directly to cases of chronic corneitis, and ulcerations, and opacities of the cornea. The above remarks do not apply to the deep-seated inflammations of the eye; in these it is better to avoid irritant applications altogether. They may be advantageously treated by ¼ gr. doses of morphia, a plan of treatment of which I have already published an epitome in the *Medical Times and Gazette* for 1859.

2. *Trachoma (of Arlt).*—Trachoma is a very common form of "granular eyelids." It is characterised by semi-transparent vesicles, which are generally most numerous along the upper edge of the tarsus of the upper eyelid. These vesicles after a time shrink and lead to plastic effusions into the substance of the tarsal conjunctiva: this effusion, by its contraction, causes atrophy of the conjunctiva, a condition recognised by disappearance of the papillary structure, together with unnatural mottled pallor of the atrophied membrane. A further, and very distressing, sequel is that the lower edge of the eyelid turns inwards and downwards, the whole eyelid bulges, the eyelashes from their normal horizontal, assume a vertical, and finally that position which leads to confirmed entropion. The best treatment of the early stages of trachoma is strong nitrate of silver drops. Entropion may sometimes be averted (or even cured), by the application of a solution of gutta-percha in collodion above (or below) the misplaced eyelashes. The operation for entropion leads me to speak of the valuable forceps of Dr. Snellen. Every Surgeon knows the intolerable inconvenience and uncertainty the flow of blood causes in operations on the eyelids.



Desmarres succeeded in remedying this evil in the extirpation of tarsal tumours by his ring-forceps *(pince-anneau)* (Fig. 1). Dr. Snellen's forceps (Fig. 2) is a modification of this instrument. It consists of a forceps the under blade of which terminates in a flat steel plate (*a*): which inserted under the conjunctival aspect of the upper eyelid—protects the eyeball, and forms the *point d'appui* of the upper blade, which terminating in a narrow rim (*b*) (of the form of a square deficient of its lower side) is applied to the cutaneous surface of the lid. By screwing up the screw (*c*) the contour of the eyelid is compressed between the two blades of the forceps, its lower edge, however, remaining quite free for the purposes of operation. In this manner the circulation is completely controlled; not a drop of blood escapes, and

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the most delicate operation may be performed on the lid with the same facility as on the dead body. Dr. Snellen's forceps has one slight drawback; from the direction the sides of the square rim (*b*) take, two parts of the eyelid escape operation, viz. the part at the inner, and that at the outer canthus. This defect I have remedied in the instrument, represented at Fig. 3. The terminal plate of my instrument is not square, but of the actual *form of the lid;* the branches of the upper rim (*β*) *diverge*, so as to include the whole line of the lid. It will be seen from the above that the original idea of the peculiar method of stopping the flow of blood is due to Desmarres; but that the lower margin of the ring (without being of any use) together with the central attachment of the handle of the forceps so impeded the Surgeon, that the instrument was only applicable to the most trifling operations. Dr. Snellen's great merit consists in his having done away with the lower margin of the ring, and given the handle a lateral attachment. With the slight improvement I have added myself, the instrument is, I think, as perfect as could be desired, and applicable to all operations on the eyelids, whether it be for en- or ec- tropion, the removal of tumours, or any procedure, to the proper performance of which the constant flow of blood affords a serious obstacle (a).

3. *Treatment of Lachrymal Obstructions.*—This is conducted at Utrecht universally after Mr. Bowman's method. I can myself bear my humble testimony to its great value. A few weeks ago I succeeded in passing a No. 6 probe down an obstruction of upwards of thirty years' standing. A good method of ascertaining the patency of the lachrymal passages is by injecting a little water through the puncta with an Anel's syringe, and watching whether it flow out of the nostril or not—a method of diagnosis which I remember seeing some years ago practised at the Hôtel-Dieu in Paris.

4. *Iris Operations.*—Donders is an advocate for iridectomy in glaucoma, recurrent iritis, and similar affections. I saw him perform it several times myself. The iriddesis (of Critchett) is also practised at Utrecht. A case of conical cornea submitted to this latter operation was notably improved by it.

5. *Extraction of Cataract.*—Professor Donders practises the downward section, steadying the globe himself by a forceps. He told me that, as Mr. France, he never had any accident result from this proceeding. I constantly adopt it myself now. After nearly completing the section the lower eyelid is allowed to drop. This practice, which is, I believe, also that of Professor Grïfe, is presumed to obviate any undue spasm of the orbicularis or recti muscles. After this and nearly all other operations, the "compress-bandage" (Druckverband) is applied by means of a narrow, fine flannel roller. All important operations on the eye are performed on the patient undressed in bed,—this appears to me a most important precaution against any undue disturbance of the parts after operation.

This and the preceding papers will suffice as a slight sketch of the Utrecht School of Ophthalmic Surgery; all I would add is my most grateful recognition of the extreme kindness I met with in Holland. To individualise would be invidious; but I cannot help quoting the names of Professor Donders, Drs. Snellen and Haffmans, and Professor Schröder van der Kolk, as among those to whom I am especially indebted. The private museum, including all his beautiful sections of nervous centres, of Professor Schröder, and the magnificent injections in the University Museum are of themselves amply sufficient to repay a visit to Utrecht.

(a) The above instruments—which might not inappropriately be termed "Eye-lid Tourniquets"—were manufactured by Mr. Coxeter, of Grafton-street.

NOTES AND QUERIES.

He that questioneth much shall learn much.—*Bacon.*

No. 451.—The Age of Etna.

I send a paragraph from Watson's "Apology for the Bible," (1816,) containing the whole story of the Canonico Recupero, of which an imperfect version has appeared in some of your contemporaries:—

"The Canonico Recupero, who, it seems, is engaged in writing the history of Mount Etna, has discovered a stratum of lava which flowed from that mountain, according to his opinion, in the time of the second Punic War, or about two thousand years ago; this stratum is not yet covered with soil sufficient for the production of either corn or vines; it requires then, says the Canon, two thousand years at least to convert a stratum of lava into a fertile field. In sinking a pit near Jaci, in the neighbourhood of Etna, they have discovered evident marks of seven distinct lavas, one under the other; the surfaces of which are parallel, and most of them are covered with a thick bed of rich earth; now, the eruption which formed the lowest of these lavas (if we may be allowed to reason, says the Canon, from analogy) flowed from the mountain at least fourteen thousand years ago." . . . . .

On the other hand—"The eruption of Vesuvius, which destroyed Herculaneum and Pompeii, is rendered still more famous by the death of Pliny, recorded by his nephew in his letter to Tacitus; this event happened in the year 79; it is not yet, then, quite seventeen hundred years since Herculaneum was swallowed up, but we are informed by unquestionable authority, that 'the matter which covers the ancient town of Herculaneum is not the produce of one eruption only, for there are evident marks that the matter of six eruptions has taken its course over that which lies immediately above the town, and was the cause of its destruction. These strata are either of lava or burnt matter, *with veins of good soil, betwixt them.*' I will not say another word upon this subject, except that the bishop of the diocese was not much out in his advice to Canonico Recupero,—to take care not to make his mountain older than Moses. X.

No. 452.—A Query for Medical Travellers.

Sir,—I give you herewith an extract of a letter from a correspondent of mine (not a Medical man) in Cameroons, West Coast of Africa, relative to a peculiar disease there, upon which I am wishful to get the best information, and I shall feel obliged by your putting the communication before your many Medical friends, who would feel a pleasure in being the means of relieving suffering humanity.

Liverpool. I am, &c. Thomas Till.

Extract of letter dated Cameroons, September 27, 1860:—

"There is a disease among the people here, like dropsy, that takes them off as rapid as fever, and such is the swelling in a few days they cannot move, and die without even having complained of anything, and, but for the swelling, you would say nothing was the matter with them. I have tried every remedy, purgatives and tonics, and at last tried turpentine; a tablespoonful twice a-day in a glass of water put them all right, but it returns after a while again, the same remedy again drives it away, without the patient even leaving his occupation. It is a painful sight to see them walking about, and I should like to know what the disease is called, and have some medicine for it. I find the men most afflicted with it are the Bushmen, who come from the interior to the sea-coast. I have found the same complaint among slaves that come from the interior to remain in Cameroons; they also get a disease not unlike small-pox. I am thus particular as I wish to have all information, to benefit the African; and if you will get a Medical man to write his opinion, I will endeavour to find a substitute in this country, which I can describe to the natives, and thus benefit the poor creatures."

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

CONDUCTED BY

JONATHAN HUTCHINSON,

Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital,

AND BY

J. HUGHLINGS JACKSON, M.D.

REPORT ON EPITHELIAL CANCER.

We record this week in a tabular form, the particulars of forty-four cases of Soot-cancer. All the patients were of the male sex, and a vast majority of them were chimney-sweeps. The subjects of the three exceptional cases had all

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been habitually employed amongst soot, either as firemen, or similar occupations.

As to the part affected, it will be seen that the scrotum was by no means the only region attacked. The prepuce is a not infrequent site of the disease. In the present table, however, several cases in which the disease occurred on the ear, the eyelid, the back of the hand, etc., and which have been previously given in this Report, are, for that reason, omitted. They will, however, all be included in our concluding comments on the series. J. H.

TABULAR STATEMENT OF FORTY-FOUR CASES OF SOOT-CANCER.

No.	Hospital, Surgeon, Date, etc.	Age.	Position, Duration, etc.	Operation.	Result and Remarks.
1	St. Bartholomew's; Mr. Stanley; 1848	25	Part of scrotum; one year	Excision of the left half of scrotum, with the testicle and cord	An inguinal gland was also excised at the time of the operation. The wound healed well.
2	St. Bartholomew's; Mr. Stanley	42	Left side of scrotum; two years	Excision of the sore, which was about as large as a shilling. Jan. 6, 1849	A sweep since boyhood, and for fifteen years liable to soot-warts on the scrotum, which he had been in the habit of slipping out.
3	St. Bartholomew's; Mr. Lawrence	32	Left side of scrotum; fifteen months	Excision of the sore, which was as large as a crown piece. Nov. 11, 1848	A chimney sweep of intemperate habits.
4	St. Bartholomew's; Mr. Stanley	44	The scrotum; seven weeks	Excision	Recovery. Fifteen months before the man had had a soot cancer excised from his neck.
5	St. Bartholomew's; Mr. Paget.	43	The scrotum; four months	Excision	Recovery. A chimney sweep. His father was a sweep, but had never had soot-cancer. A brother of his had died of the disease recently, having previously been operated on for it.
6	Guy's; Mr. Cooper	28	Scrotum	Excision	Recovery. A very cachectic man; the son of a chimney sweep, and himself in the trade since early boyhood.
7	St. Bartholomew's; Mr. Paget	..	Glans penis	....	A sweep. A cancer of the scrotum had been excised sixteen years before, when one testis was also removed.
8	St. Bartholomew's; Mr. Lloyd	46	Scrotum, in two different parts	Excision of both growths	Recovered, and the wound healed soundly The enlarged glands subsided.
9	King's College ..	36	Scrotum; fifteen months	Excision of whole front of scrotum	Recovered.
10	St. Bartholomew's; Mr. Stanley	37	Scrotum	Excision	Recovered. The growth was of small size About a year after the operation the inguinal glands enlarged and ulcerated, and he was subsequently under Mr. Stanley for a large, cancerous ulcer in the groin, which was in an incurable stage.
11	St. Mary's; Mr. Lane	32	Scrotum	Excision	Recovered.
12	Guy's; Mr. Cock ..	40	Scrotum; very large; six months	Excision	Recovered. The man was not a sweep, but in his occupation, as gas-worker, was much exposed to soot, etc. A similar growth had been excised by Mr. Key nine years before.
13	"Dreadnought;" Mr. Tudor	56	Scrotum; five years	Excision	A stoker and fireman; never a sweep. The ulcer was the size of a crown piece.
14	St. Bartholomew's; Mr. Stanley	20	A horny growth on a cancerous base	Removed by the écrasour	The wound was long in healing.
15	St. Bartholomew's; Mr. Paget	50	Large; on scrotum; two years	Excision	Recovered.
16	West Norfolk; Mr. Kendall	60	A large ulcerated epithelial cancer of scrotum	Excision of entire scrotum and both testes (the latter healthy); the wound healed well	The patient was a small farmer. The ulcer resembled "soot-cancer." It was of four years' duration, but had increased rapidly of late.
17	Liverpool; Mr. Long	50	Large soot-cancer of scrotum; fifteen months	Excision of a large part of the scrotum	A chimney sweep. Recovered.
18	Liverpool Royal; Mr. Long	50	Small size; two years' duration; scrotum	Excision	Recovered.
19	Brighton; Mr. Turner	30	Scrotum	Excision	Recovered.
20	Royal Berkshire; Mr. May	44	Scrotum; six months	Excision	Recovered. A soot-cancer had been removed two years and a-half ago.
21	The Dorset; Mr. Tapp	59	Scrotum	Excision	Recovered. A cancer had been removed from his scrotum fourteen years before, and he had been wholly free from the disease for two years and a-half.
22	The York; Mr. Hey	45	Scrotum	Excision of nearly the whole of the scrotum	Recovered. A chimney sweep.
23	The York; Mr. Hey	71	Scrotum	Excision	Recovered. No note as to the man's occupation, but he was probably a sweep.
24	The Metropolitan Free; Mr. Childs	56	Lower part of scrotum; of twenty months' duration	Excision. The glands in the groin were slightly enlarged	Recovered. No hereditary history of cancer. He had been a sweep since the age of 10 years.
25	Guy's; Mr. Hilton..	64	....	Excision	Recovered. The man was a stoker, and had been much exposed to the irritation of soot.
26	St. Bartholomew's; Mr. Wormald; Sept., 1850	50	Left half of scrotum; it began in the scar of a former operation	Excision for a second time, Sept., 1850. It had then been ulcerated for three years	Sir Astley Cooper had excised the original disease twenty years before the date of the man's admission under Mr. Wormald. The scar remained quite sound fifteen years, although he continued at his trade.
27	St. Bartholomew's; Mr. Paget; 1852	48	In the glands of both groins; he had had no disease of skin of scrotum; it had begun four months before	Excision of glands in both groins on August 14, 1852. The disease was an open ulcer in the right groin, and enlarged glands in the left. Chloride of zinc was applied to suspicious granulations, which appeared after the operation	A sweep for forty years. Father not a sweep. The sores were almost healed at the date of last note. (See *Medical Times and Gazette*, p. 414, 1852, vol. ii.) This man is still living, and has had no recurrence of his disease (1861).
28	St. Bartholomew's; Mr. Stanley	40. 21 when it appeared.	Three excisions during nineteen years, and a fourth of the inguinal glands	Excised by the man himself a year after its appearance, as a painful wart, when aged 21. It reappeared six years afterwards, and two years later was excised by Mr. Lawrence. It recurred a third time five years after Mr. Lawrence's excision, and was a third time excised in 1851 by Mr. Lloyd. After the last operation the glands on both sides for the first time enlarged. Mr. Stanley on May 15, 1852, excised the glands from both groins	A sweep when a boy, and his father had been one before him. He abandoned the trade after the first wart (aged 21), and never afterwards exposed himself. None of his relatives known to have had cancer. The man left the Hospital quite well after Mr. Stanley's last operation in 1852.

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No.	Hospital, Surgeon, Date, etc.	Age.	Position, Duration, etc.	Operation.	Result and Remarks.
29	University College; Mr. Marshall; 1853	45	Of the scrotum	It was first excised by Mr. Liston in 1833 (twenty years before). Mr. Marshall excised the recurred disease in Sept., 1853	He recovered well after the second operation.
30	King's College; Mr. Fergusson		Of the scrotum	Entire scrotum and almost all the integument of penis removed	Recovered.
31	Leeds; Mr. Smith ..	23	The cheek	Excised	A very dirty man. He recovered well after the excision.
32	Winchester; 1853 ..		Scrotum	Excision	Recovered.
33	St. Bartholomew's: Mr. Paget		Scrotum, in two distinct parts	Excision	Recovered.
34	Bedford	30	A pimple seven years ago; ulcerated for a year	Excision	The enlargement of glands disappeared as the wound healed.
35	Liverpool Royal; Mr. Halton		In good health; scrotum	Excision in 1854	Recovered.
36	St. Bartholomew's; Mr. Stanley	42	Warty cancer on scrotum	Excision, April, 1854	It was in an early stage, and the first appearance.
37	Westminster; Mr. Brooke	45	Extensive. On the scrotum	Excision of almost the whole of scrotum, leaving the testes	Recovered. He was the son of a sweep, and had been engaged in the occupation from childhood. No relatives had had cancer. The disease recurred in the glands of the groin, and the man died about eighteen months after Mr. Brooke's operation.
38	St. Bartholomew's; Mr. Lawrence	33	The greater part of scrotum	Two-thirds of scrotum and one testicle were excised	Recovered.
39	Reading; Mr. Bulley	60	Scrotum	Excision	Recovered.
40	Nottingham; Mr. T. Wright	56	Scrotum; nine months	Excision of the diseased part of scrotum	The enlarged gland was destroyed by escharotics. Recovered.
41	Bradford; Mr. Meade	28	Scrotum; six years	Excision of the whole posterior part of scrotum and part of perineum. The testes were laid bare	The wound healed in six weeks.
42	St. Bartholomew's; Mr. Stanley	40	Scrotum; nine months	Excision	Recovered.
43	St. George's; Mr. Prescott Hewitt	30	Scrotum	Excision	Recovered.
44	St. Bartholomew's; Mr. Skey	35	Scrotum and glands	Excision; the excision of the glands was incomplete	The primary cancer of the scrotum was excised, and a few months later a glandular mass from the groin.

ST. BARTHOLOMEW'S HOSPITAL.

MEDULLARY CANCER OF THE TIBIA—AMPUTATION—RECOVERY—DEATH SUBSEQUENTLY.

(Under the care of Mr. PAGET.)

[Reported by Mr. ROGERS, late House-Surgeon.]

William M., a sickly-looking lad, was admitted, under the care of Mr. Paget, on August 23, for swelling of the upper part of the right leg, attended by great pain. The swelling, on examination, appeared due to enlargement of the head of the tibia on its inner aspect. Below this point the leg was œdematous. He dated the commencement of the swelling to about six months back, when he fancied he received a slight blow on his knee. It increased gradually, but more during the last two months; and in this latter interval it had become more painful. He had had advice from a Medical man, who considered it to be an abscess, and made an incision over it. Nothing but blood followed. The knee-joint could be easily bent, and there was not much pain on pressure. The position in which the limb lay was on the right side, a pillow supporting the bent knee-joint. The tumour felt elastic, and the skin over it was tight. The circumference of the limb at the head of the tibia was seventeen inches. Mr. Paget considered the enlargement to be due to medullary cancer, and advised that the limb should be amputated.

On the 29th Mr. Paget removed the limb in the lower third of the thigh by the circular operation. On examining the leg, there was found extensive medullary cancer, mixed with some fibro-cellular tissue; the mass was intersected with large cysts, from which a thick, blackish, viscid fluid oozed out. The cartilage and ligaments of the joint were not involved in the disease: the tibia, on section, appeared healthy, the disease being confined to the periosteum.

After the operation, the patient progressed very satisfactorily for above a fortnight, when the wound assumed an unhealthy aspect, the bone threatening to protrude, and the discharge being of an unhealthy nature, thus preventing the union of the opposite edges. To secure a tolerably good union, and to prevent the drain from exhausting the patient, the wound was syringed out every day with a weak solution of zinc, and the stump placed on a back splint, a many-tailed bandage serving to keep the limb quiet; the edges of the wound were brought together by means of straps of plaster. A very unfavourable symptom in this patient was the constant sweating at night. About September 20 he was so far recovered as to be allowed to get about; but, from some imprudence, he fell down and hurt the stump, which soon after assumed an angry and irritable look, while a thick greenish-yellow discharge escaped from the wound. The patient himself had an unhealthy appearance, though he complained of no pain. The lad ultimately recovered, and was discharged on October 20, three months after the operation. Of the history of the patient subsequent to leaving the Hospital nothing is known beyond the fact that he died on November 15.

MEDULLARY CANCER OF THE FEMUR—DEATH IN ABOUT FIVE MONTHSr

(Under the care of Mr. PAGET.)

John T., aged 23, admitted under the care of Mr. Paget, on August 20, for a swelling in the position of the internal condyle of the right femur.

August 20.—He states that three or four months ago he began to have aching pain in this position, which he attributes to some unusual exertions at that time. It was, however, not until the last week in July that he noticed a swelling there. He says that it was then as large as now. The only pain he has in it is a little aching, and this he says is not present when he walks about; but comes on when he sits down. It has never been tender to the touch. He never had syphilis, and although delicate, he never had any special ailment. He looks pale and is rather emaciated.

Mr. Paget, after keeping him under observation a short time, advised him to submit to amputation. He declined, and was therefore discharged.

He was re-admitted in December, the disease having increased very much. There was a large ill-defined tumour, ulcerated on the surface and bleeding. The man said that it had been opened by a lancet a little time before, but that nothing but blood followed. He was very much emaciated, pale, and exhausted. He died the next morning. No autopsy was permitted.

MEDULLARY CANCER OF THE FIBULA—AMPUTATION—RECOVERY.

(Under the care of Mr. LAWRENCE.)

[Reported by Mr. GREENHILL.]

Annie M., aged 17, looking in fair general health, was admitted on October 11 for a large tumour of the left calf. She first noticed it in February as a hard lump about the

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middle and outer side of the leg. It had, however, increased much more rapidly during the six weeks previous to her admission. The tumour was a general swelling of the calf, soft, but fluctuating. Amputation was performed two days after her admission. On examining the removed limb, the growth which was clearly encephaloid, was found to proceed from the fibula. The patient recovered well from the operation. The wound was healed in six weeks, when she was discharged; but a second tumour had made its appearance above the clavicle, and had caused her a good deal of pain.

EXTRAVASATION OF URINE IN A CHILD—FREE INCISIONS—RECOVERY.

(Under the care of Mr. LAWRENCE.)

[Reported by Mr. GREENHILL.]

John L., aged 12 months, a moderately healthy-looking child, was brought by his mother to St. Bartholomew's Hospital on November 7, with slight swelling of the scrotum, which was first noticed on the previous morning. The mother stated that the child had been in good health up to about three weeks prior to this date, when after cutting two upper teeth, he became fretful, and seemed to strain a good deal on passing his motions and urine. He was ordered a dose of castor oil and a warm bath. When brought the next day, the 8th, the mother stated he had not passed any urine since the previous morning. The swelling had increased, and extended to the prepuce. An instrument was passed into the bladder to discover, if possible, the cause of what now appeared to be extravasation of urine, but nothing could be found. Another warm bath was ordered.

November 9.—Little or no water had been passed, and the swelling had much increased. The scrotum now appeared very much swollen, tense, and shining. There was also a prominent swelling in the perinæum, but no appearance of sloughing. An incision was made in the perinæum, and another on the pubes. The prepuce was slit up to allow a catheter to be passed, but only a small quantity of urine was drawn off. In the evening two incisions were made in the scrotum.

10th.—The tenseness and swelling had rather increased, especially towards the left groin, where there was slight discoloration of the skin. Here another incision was made. The child appeared to be in great pain, and was given two minims of the liq. opii. sed. Fluid of a urinous smell passed by the wounds.

11th.—He had passed a comfortable night, and had also taken his nourishment well. The prepuce, scrotum, and adjacent parts were much diminished in size, and less tense. A tolerably large quantity of fluid had passed. His bowels were well open.

12th.—The swelling was still decreasing. The urine flowed from the incisions.

14th.—Progressing favourably. Some urine had been seen to pass by the urethra.

18th.—The urine now passed naturally. The wounds were almost healed, excepting the two upper ones, from which a slight quantity of fluid still flowed.

24th.—The scrotum and lower part of the groin had been rather more swollen the previous evening, but had diminished again to-day. A small quantity of fluid of a decidedly urinous odour flowed from the upper incision.

December 10.—The prepuce became much swollen previous to this date, but it recovered without anything being done to it. All the wounds having now healed, and the child being apparently well, he was discharged.

SELF-INFLICTED WOUND IN THE THROAT, IN DELIRIUM TREMENS — LIGATURE OF THE CAROTID—DEATH ON THE FOURTH DAY.

(Under the care of Mr. LAWRENCE.)

[Reported by Mr. GREENHILL, House-Surgeon.]

The following case presents many points of great interest, independently of its being the record of a rare and important operation. The patient inflicted a severe wound on his neck whilst under the influence of delirium tremens. He lost a considerable quantity of blood, and, it being impossible to secure the divided artery, the carotid was ligatured. After the operation the symptoms of delirium tremens, under the influence of morphia and stimuli, abated, but returned again on the second day. The returned cerebral symptoms appear to have been still those of delirium tremens. There was no paralysis. Another point of interest was that digitalis, in half-ounce doses, was administered. In a case so complicated as this was, perhaps all the information derived as to the influence of the drug was that it appeared to do no harm. In another case, which we shall shortly publish, considerable benefit appeared to follow its administration:—

Francis H., aged 31, was brought to the Hospital about twelve o'clock on Wednesday, January 9. Whilst under the influence of delirium tremens he had inflicted a wound with a penknife on the right side of, and a little above, the thyroid cartilage. There was a considerable and constant welling up of blood, which was controlable by pressure on the trunk of the common carotid. He was placed under the influence of chloroform. Mr. Lawrence endeavoured to find the bleeding vessel, but was unable to do so. He therefore ligatured the common carotid, in the position where it is crossed by the omo-hyoid muscle. The hæmorrhage ceased. The wound was inflicted at 11 a.m., and the artery ligatured at 12.30 p.m. The patient seemed better, and was quiet during the rest of the day. Morphia was given at bed-time, —two doses, half-a-grain each, and he passed a quiet night. In the morning he seemed better, and answered questions quite rationally. This improvement continued until the middle of the next day, Friday, the 11th, when the delirium returned. He continued delirious all day, and Mr. Lawrence determined on trying the effect of large doses of digitalis. At 11.8 p.m., being still in nearly the same state, half-an-ounce of tincture of digitalis was given. His pulse was then 132, of good volume. At 2·20 a.m. he still remained in the same state, his pulse being rather weaker, but of the same frequency. The same dose of digitalis was repeated. At 6·15 a.m. there was no alteration in the frequency of the pulse, but it was still weaker. There was no sickness. The delirium had rather increased. He was now given forty drops of tincture of opium, which dose was repeated in two hours. After this he became rather quieter, but obtained no sleep. He took a little wine and beef-tea during the day. In the evening, the delirium still remaining, he was given half-a-drachm of Battley's solution with half-a-grain of tartar emetic, after which he slept a little, though restlessly. About 2.30 a.m. on Sunday, January 13, he became worse, and from that time he began to sink. He died at 5.30 a.m.

At the autopsy, although a careful dissection was made the precise vessel wounded was not discovered. Nothin whatever was found abnormal in the state of the brain.

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Medical Times and Gazette.

SATURDAY, JANUARY 26.

PUBLIC ANALYSTS.

We hear sometimes of arts that have been lost. Some of them have perished through disuse, as the art of embalming the dead and illuminating manuscripts; but strange to say, there is one which is incessantly ventilated, which is attempted with intense and increasing frequency; and yet which is for common purposes lost,—and that is, the art of making an intelligible, useful, and effective Act of Parliament.

Look at the Act of last Session for Preventing the Adulteration of Articles of Food or Drink. The existence of

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adulteration, and its almost universality, are notorious; the mischiefs it creates, endless. The stomachs of the poor are robbed of their wholesome nourishment; their money is wasted on worthless counterfeits; their health is sometimes directly injured by substances used to cheat the eye; honest dealers are subjected to remorseless competition; and still worse, a chronic and habitual state of hypocrisy and fraud is fostered amongst manufacturers and retail tradesmen, and their entire staff of workmen and apprentices. Astute mendacity takes the place of honest industry. The temper of mind that can tolerate such practices is incompatible with all the associations created by good education—all the heroic virtue of the Heathen, and the more stringent morality of the Christian. Public justice and expediency, therefore, alike require the suppression of these practices, if only on the ground of the extensive and heartless demoralisation which they cause.

Let us now examine the Act. Section the first reads well; for it provides a penalty not exceeding five pounds and costs, as a punishment for adulteration, and it gives the Justices power to placard the offender's name at his own expense; but then it stipulates that the adulteration with any material injurious to health, must be *known to the seller*; and that the buyer who does not ask for a pure and unadulterated article has no complaint if he does not get one.

The next Section gives power to Vestries, Town Councils, and other local authorities, to appoint Analysts (subject to the approval of the Home Secretary), and pay to them such salary and allowances as the said authorities shall think fit.

Any purchaser of any article of food or drink, in any district where an analyst is appointed, may have such article analysed on payment of a fee not less than half-a-crown, nor exceeding half-a-guinea; and is entitled to receive from the Analyst a certificate of the result of his analysis, specifying whether the article is adulterated, and also whether it is so adulterated as to be injurious to the health of any one eating or drinking the same,—such certificate being evidence before the Justices in the absence of evidence to the contrary.

In fairness to the seller of any article of food or drink alleged to be adulterated, the purchaser, if he make complaint before Justices, must prove that at the time of purchase he gave notice to the seller, or his servants, of his intention to have the article analysed, and that he gave him opportunity of accompanying him to the Analyst, in order to make sure that the article purchased be not tampered with.

So much for the Act. Now let us imagine the working. The local authorities, who are empowered to give such salary or allowance as they may think proper, are endeavouring, as may be seen by the advertisements in this Journal, to give neither salary nor allowance, but to obtain Analysts who will execute the duties at their own charge, and be content with the fees provided by the Act. Doubtless there are persons who will take any office at any salary for the chance of what may fall in along with it; but we suspect that some such persons may resemble Portuguese Judges, and live by what they can extort or cajole from the suitors. The notion that half-a-crown or half-a-guinea is remuneration enough for an elaborate microscopical or chemical examination, including the possibility of being dragged into Court, is absurd. Yet we frankly believe that the public at large, not being aware how costly and troublesome a process analysis really is, may conceive that these fees are ample.

We may mention as examples that a gentleman who suspected his bread not to be pure, paid ten guineas for an examination of it by a well-known Analyst; and we believe, without fear of contradiction, that the detection of alum, and general analysis of a loaf by any man of skill and character is worth at least from two to three guineas.

Some district authorities have voted a sum towards apparatus and expenses: so far well; but we believe that there is no adequate knowledge of the expenses incidental to so troublesome and responsible a process as analysis; and it is perfectly abhorrent to English notions that persons like Analysts, invested with quasi-judicial functions, should be tempted into wrong-doing by the meagreness of their remuneration.

But supposing the Analyst appointed, who is to set him to work? Let us give a case by way of example.

In collecting some preliminary information as to the probable working of this Act, the Medical Officer of Health of an important London parish tells us that he sent a reliable messenger to purchase samples of milk from every dealer in the parish. The number of dealers is forty, and two or three separate samples were sent for from such of them as sold the poorest milk, so as to make sixty in all. In every case the messenger was directed to ask for a pennyworth, or two pennyworth of the best new milk; thus leaving it to the seller to give whatever quantity he could afford to sell for the money. The range of quantity and quality in the various specimens was marked enough,—some dealers giving twelve and a-half fluid ounces: others no more than eight. But the result of the examination, so far as it concerns us now, is this: that the dealers who live in good streets, and supply respectable and intelligent people, for the most part furnished tolerably good milk; whilst they who dwelt in back streets and mews, supplied the worst; and did not compensate for want of quality by excess of quantity. All the samples, nine in number, which were of the sp. gr. 1020 or lower, (or in plain English, those in which there was as much water as milk, or more), came from courts and mews and the dark back streets inhabited by the very class who ought to get most money's-worth for their money. One astonishing liquid there was, with a sp. gr. of 1011 (*i. e.* about three parts of water to one of milk), and of a light golden colour. This was openly for sale, and was doubtless purchased for the benefit of children—weaning infants, perhaps—but it was so palpably thin, that, as our informant declares, no sober and intelligent person would have used it as good milk. A subsequent sample from the same shop, after caution had been given to the vendor, showed a sp. gr. of 1015.

The moral is this, that the persons plundered by adulteration, are chiefly those who are too ignorant to protect themselves by the exercise of their own senses; and that the notion of expecting any such person to give notice to a vendor and go to an Analyst, and pay a fee for examination, is absurd.

Here, then, is the weak part of the Act,—the want of some machinery to set it going for the benefit of the poor and ignorant.

If the poor do not, who will avail themselves of the powers of the Act? Probably there will be a few—but a very few—dyspeptic and fidgety persons who may desire their loaf or pickles analysed; but the payment of half-a-guinea is a process that makes many people pause. Some retail dealers, too, it may be expected, will have the courage to test the wares which they purchase of the manufacturer. But the chief harvest of the Analysts may be expected from those puffing and unscrupulous dealers in adulterated goods, who will employ purchasers, supply them with pure articles, get the Analyst's certificate, and on the strength of this puff off many a factitious compound. Testimonials from Analytical Chemists seem really to be part of the stock-in-trade of a certain class of tradesmen, and it surely must have been their good genius which provided an Act enabling them to be got for half-a-guinea. Very few, we suspect, paid so little for the testimonials which they so liberally circulate. It is conceivable, too, that honest tradesmen may be subjected to infinite annoyance and extortion from ruffians who may enter their premises, make a purchase, and announce their intention of going to the Analyst.

All these circumstances point to one conclusion: that the

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Act ought to be so amended as to enable the whole process to be conducted under the authority of an impartial public officer. The Medical Officer of Health might be such a person. He might protect the poor purchaser and honest dealer alike. He ought to be able to make purchases, and institute analyses for the purpose of seeing if there be *primâ facie* grounds for proceedings; and if there be, they should be carried on by the local authority, in the same manner as proceedings in the case of nuisances are now so frequently and effectually done.

HOSPITAL ACCOMMODATION.

Mr. John Roberton, of Manchester, has lately called attention to the sanitary state of our Hospitals, and chiefly of those in the manufacturing districts. He states that more Hospital accommodation is required to meet the increasing number of accidents which attend upon our advanced state of civilisation. Not only are the accidents thus associated with the manufactures of the country very numerous, but they are also, many of them, of a most serious nature. The number of the injured who die of their injuries in the Manchester Hospital is very great. Of 637 in-patients received on account of accidents into that Institution, in 1858, "102 died within seven days of their entrance into the wards"—that is, 15 per cent. of the in-patient accidents for the year—a proportion immensely greater than the per-centage of deaths which occur in the London Hospital. This fact at least proves one thing, viz.—the severity of the accidents which the operatives of Manchester and its neighbourhood are subjected to; and it also points out, strongly enough, the duty of those whose wealth is derived from the work of these operatives to provide for the inevitable misfortunes which are associated with their operations. Mr. Roberton does not, however, make out the whole of his case. He does not prove that there is any *additional* Hospital accommodation required for Surgical patients. Has a case of injury ever been refused admittance, through want of room, into the Hospital at Manchester, or into any other Hospital? This Mr. Roberton has not shown to be the case. He shows, however, that the Manchester Hospital requires, like many other Hospitals, improvement in its internal arrangements; that the patients require more air, and better air than they at present get. This is a matter which must be settled by the Manchester people; and certainly a grievous shame it would be to that centre of merchant princes, if amidst palaces of warehouses, and the application of high science in all matters of trade, they should allow their refuge for the sick to degenerate into a sort of mediæval *Hôtel-Dieu*. But Mr. Roberton brings in the same bill of indictment against most of the Hospitals of the country:—

"Within the last few years I have looked into a considerable proportion of all the Infirmaries in the kingdom, and find them to be, with scarce an exception, insalubrious."

He thinks the Coroner ought, in fact, to inquire whether his deceased "died of the hurt or of the House." These are severe allegations.

He seems to think that a good deal of the insalubrity of our modern Hospitals is due to the modern art, or nascent science, of ventilation, which promises more than it can perform. On this head he says the following good thing:—

"It is somewhat humbling to our self-esteem in this wise age to discover, as we do, that the older the Hospital, the better in general the plan of construction. Let anyone walk through the wards of old Guy's Hospital, built 140 years ago, with numerous windows reaching to near the ceiling, face to face in the side walls, and 'hopper-mouthed' ventilators in an upper pane of each window, securing a constant renewal of the atmosphere; and then look into the new Hospital, erected by Hunt's bequests, with its wide floors divided longitudinally in the middle by a wall, to the obstruction of proper ventilation, and he is apt to wonder what has become of the good sense of former days. Let him then proceed to inspect some other of the modern Hospitals in and about the city, and he will discover how little the architects, in planning these, could have thought about the objects for which the buildings were erected—namely, the speedy relief or cure of the sick and wounded. Ask an architect to plan for you a cotton mill, and he is guided solely by the object you have in view—the spinning of cotton—and the rooms are sure to be lofty and full of light; but let the plan be for an Hospital, and his thoughts are apt to run after architectural beauty—how he may make the building graceful—an ornament to the locality in which it is to stand. In proof of this, we need point to no more striking instance than we have in the noble exterior, and very faulty interior, of the Royal Infirmary in this city."

We could point out to Mr. Roberton, in this metropolis, a case or two of modern Hospitals, in which remarkable ugliness of architecture is combined with a very intricate and defective condition of artificial ventilation.

Mr. Roberton says another good thing or two about Surgical patients—how their wounds and injuries are aggravated, and complicated, and compounded, by the rough assistance of unknowing friends; and he relates, *à-propos*, the anecdote of Pott:—

"The illustrious Surgeon, Percival Pott, was much alive to the risks from careless handling when there is fracture of a limb. Once, it is said, when riding in an open carriage, he was from some cause thrown out, and felt that he had broken a leg. People rushed to raise him, when, having still hold of his cane, he struck out right and left, much to the astonishment of the spectators, who thought he must be insane. On some one asking what he meant, his reply was—'If you will bring a door to lay me on, then you may lift me.'"

Mr. Roberton does not show how this difficulty is to be got over. He recommends the establishment of ambulances, fitted for the conveyance of patients with broken limbs, and the appointment of District Surgeons to look after *first* treatment: but how are the people to be taught all this? They see a fellow-workman suffering,—perhaps blood gushing from him,—and they naturally hurry him off to an Hospital, and in the quickest and handiest way,—which is, unfortunately, in a cab. The unsophisticated rustic, in this case, shares a luckier fate,—the traditional shutter or door being his conveyance when the subject of these accidental misfortunes. Neither will it do to remove Hospitals from their central positions in our large towns. Manifestly, we want them, or their reception departments, where they are most readily accessible. But the removal of the principal or curative portion of the establishments outside the towns—as so strongly recommended by Miss Nightingale, with her usual clear perception—is a consummation most desirable; and we are happy to find that men of charitable minds are moving in this direction.

Mr. Roberton has done much service in calling attention to the hygienic condition of our Hospitals, and especially of his own Manchester Hospital; and if the defects he speaks of are really inherent in that Hospital, his words, we trust will not fail to bring about a reformation.

THE WEEK.

Whoever will take the trouble to wash out, with distilled water, one of the common bell-glasses which are usually hung over gas lights, and test the liquid, will be astonished at the large quantity of some compound of sulphuric acid which is revealed. This is the substance which forms a greasy film on the furniture, corrodes metallised surfaces, destroys the binding of books, and creates headache. It is generated by the oxidation of a sulphur compound in the gas, and this—not the well-known and offensive sulphuretted hydrogen, the presence of which is revealed by lead-paper, and can only occur through accident or great carelessness—but a highly volatile compound, supposed to be a bisulphuret of carbon,

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which has hitherto existed in the best gas, and defied all cheap and simple means of elimination. Hence, even the best Cannel-gas, usually contains from five to fifteen grains of sulphur in this combination per 100 feet; and a late Act of Parliament legalised the presence of twenty grains per 100 feet. One common batswing burner generally burns about two and a-half cubic feet of Cannel-gas per hour; and it is easy to see that in any apartment in which three or four such burners are alight for three or four hours, quite an appreciable quantity of sulphate of ammonia will be found, and in defiance of even the best ventilation (supposing it to exist) will create some annoyance. We are glad to hear from the *Builder*, that a clergyman, the Rev. W. R. Bowditch, of St. Andrew's, Wakefield, has at last solved the difficulty, and that his success is attested by Letheby, Warrington, Frankland, and others of the best chemists. The desideratum was a cheap and simple method (for the elimination could already be effected expensively), and this Mr. Bowditch seems to have found in perfection. He discovered that common clay has the power of converting bisulphide of carbon into sulphuretted hydrogen, which, when formed, could easily be absorbed by lime, and converted into *blue billy*, as in the old processes of purifying gas.

"The method adopted by Mr. Bowditch consisted in the repeated alternation of clay and lime in say ten or twelve compartments, through which the gas was made to pass, each clay compartment decomposing so much bisulphuret of carbon, or other sulphur compound, into sulphuretted hydrogen, and each lime compartment absorbing and fixing that sulphuretted hydrogen, till all was extracted, and the gas remained perfectly free and pure. The clay in its use, moreover, had a special power of purifying the gas from ammonia and its compounds; and so valuable is the clay thus impregnated said to be, as a manure, that agriculturists have supplied gas companies with new clay for the old."

Mr. Bowditch seems next to have discovered that heated lime has the same power that clay has, of decomposing the bisulphide of carbon; and this led him to use alternate layers of hot and cold lime: the former creating the sulphuretted hydrogen, the latter absorbing it. Afterwards he made out that hot lime, *if moistened*, will decompose and absorb the results as well. It is to be hoped that the Gas Companies will avail themselves of his discoveries; meanwhile, private consumers, who could not resort to the use of heated lime, may still protect themselves by means of his original alternation of cold clay and lime.

"Consumers," says Mr. Bowditch, "can protect themselves against burning ill-purified gas just as easily as they can protect themselves against drinking dirty water. The latter is filtered in a domestic filter, and the former can be as easily purified in a domestic purifier. In fact, the trouble in reference to gas is far less than is required for filtration of water. A purifier containing a series of ten or twelve trays of clay and lime would keep back every impurity which can be removed by cold purification, and would last for several months without being touched. Twice a-year would be sufficient to renew the purifying material, and the time occupied in doing it would not exceed half-an-hour. As a precaution, therefore, it would be well if all persons in trade, whose articles are injured by bad gas, and all private persons who burn gas in well-furnished apartments, were to have a private purifier fixed near the meter, which their gas-fitter would cleanse and re-charge twice a-year for a shilling. They would thus protect themselves against unavoidable accidents which may render impure for a time the gas of the best-managed company, and also against systematic neglect or ignorance."

The newspapers have contained a report of an inquest at Henley-on-Thames, and of proceedings before the magistrates respecting the cause of death of a young woman named Clarke, a maid-servant in the family of Mr. Mitchell, a retired Naval Surgeon, resident near that town. The evidence given by Mr. Jeston, Mr Brook, and Mr. Brown, established the fact that the deceased was in the extremest state of filth, emaciation, and debility, with gangrene of some of the toes: although five feet in height, she weighed only fifty pounds. A verdict of manslaughter was returned against Mr. Mitchell, who was held to bail; but we are not in possession of any direct evidence showing that the deceased had been starved or otherwise ill-treated by him, or by his orders. Great stress was laid at the inquest on the extreme filthiness of the deceased girl's person. We well recollect being summoned to investigate a similar case; a maid-of-all-work in a respectable family, who had long been weak and ailing, was found dead in her bed one morning, and certainly the state of personal filth in which every part was found, except her hands and face, was incredible. This is a common consequence of languor and illness in man and animals alike.

In another part of our present impression will be found the report of certain proceedings, at Bow-street Police-office, against a registered Medical Practitioner, for an infringement of the Lunacy Act. As the evidence then made out a *primâ facie* case, the magistrate committed the defendant for trial; we therefore abstain from remark, but would refer our readers to the 90th section of the above Act, which provides,—

"That no person, except a person deriving no profit from the charge, shall receive to board or lodge in any house, other than an Hospital, or an Asylum, or a Licensed House, or take the care or charge of any one patient as a lunatic, or alleged lunatic, without the like order and Medical certificates as are required in the reception of a patient into a Licensed House; and that any person who shall receive into an Unlicensed House, not being an Hospital nor an Asylum, or take the care or charge of any person therein as a lunatic without first having such order and Medical certificate, shall be guilty of a misdemeanour."

The vexed question, "Who is a Doctor?" has been replied to by the King and Queen's College of Physicians in Ireland, who have just issued the following manifesto:—

"The College of Physicians having had before them the opinion of the Right Honourable the Attorney-General for Ireland, and the Solicitor-General for England, that their Fellows and Licentiates were legally entitled to the degree and title of Doctor of Medicine, and that they were legally empowered to embody such in their diploma, have adopted the following form into their bye-laws:—

"'We, the President and Fellows of the King and Queen's College of Physicians in Ireland, having duly and deliberately examined A B in the Principles and Practice of Medicine, and in the accessory sciences, and having found him well versed therein, do by these presents grant to him licence to practise in the Faculty of Physic, and do certify that he has obtained, and is hereby entitled to, the degree, title, and qualification of Doctor of Medicine and Licentiate of the said College. In testimony whereof we have hereunto subscribed our names and affixed our comman seal at the College Hall, in the city of Dublin. This day of 186

President.

Vice-President,
Censors,
} Fellows.'"

A very important question, deeply affecting the public welfare, was discussed at the Medico-Chirurgical Society on Tuesday evening. A full report of the meeting will appear, as usual, next week; and we only allude to it now in order to draw attention to a letter from a distinguished Fellow of the Society, which appears in another part of this number, advocating a measure of which we most cordially approve—the appointment of Committees of Investigation by the

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Society upon scientific questions of importance. We trust the Council will think well of the proposal.

Dr. E. Smith has recently exhibited, in active operation, at the Medical Society of London and the Society of Arts, the new French test for the detection of alcohol in the breath and the perspiration. The test is prepared by dissolving 1 part of bichromate of potass in 300 parts of strong sulphuric acid, and it is applied by simply breathing or passing the vapour from the skin through a drachm of it. M. Lallemand made his experiments upon the skin of the dog; but Dr. Smith has shown that by enclosing the arm of a man in a caoutchouc bag, through which a current of air is made to pass, the presence of alcohol may be detected at the end of one, two, three, and four hours after alcohol has been taken, and doubtless it might be shown for a much longer period. He finds that it is best shown in those who perspire freely. The experiments are very striking, and those upon the skin are full of interest and importance.

Last week an action, which reflects little credit on its originators, was brought against Mr. J. Swift Walker, a Surgeon in successful practice at Hanley, in Staffordshire, and who formerly passed a highly creditable studentship at King's College Hospital. It was alleged by the plaintiff that the treatment of his case had been unskilful, because there remained, at the end of six months, a slight projection of the inner ankle, after a severe fracture of the tibia and fibula extending into the ankle-joint. Mr. Furneaux Jordan, of the Queen's Hospital, Birmingham, and Drs. Hallam and Wood, of Newcastle (Staffordshire), testified to the great care, skill, and Surgical knowledge which had been evinced in the treatment of the case. The verdict, we are happy to say, was for the defendant.

A Dentist is to be appointed to the Infirmary at Southampton. There are four respectable Dentists in practice in the town; but a law has been made which excludes three of these gentlemen from holding the appointment. It has been ruled that no one can hold the appointment who has not obtained the Dental Licence of the College of Surgeons. As only one Dentist in the town has obtained the diploma, the other Dentists are practically excluded even from becoming candidates. This is an interference with liberty of choice which we should think it unlikely the Governors will submit to. It is unjust in every way. The Dental Licence of the College of Surgeons has only recently been established, yet it is used as a test of fitness for gentlemen who were in practice many years before it was thought of. Again, many Dentists object to it on principle. They do not wish to become a dependent section of the College of Surgeons; but prefer to belong to an independent College of their own. The Medical Profession also—if we may judge by a memorial signed by some *three thousand* Practitioners—would much rather see the Dentists members of a College as distinct from the College of Surgeons as the College of Engineers, or the Institute of Actuaries, or the Royal Academy of Arts, than half-acknowledged Members of a College which gives them a title to assume the prefix or affix of SURGEON to their true title. Surely the Medical Officers of the South Hants Infirmary could have had nothing to do with this most unjust and impolitic regulation.

Professor Syme has written to the *Times* to complain of the barrack accommodation provided for the 78th Highlanders in Edinburgh Castle. The married men are packed away in low, narrow, ill-ventilated rooms, with an area of about twenty square feet, and not much more than six high; in each such room are three married couples, and from six to ten children. The stowage of the single men is scarcely less indecent and unwholesome.

The Special Meeting of the Board of the Queen's Hospital, Birmingham, of which we gave notice in a former number, has led to the resolution to appoint a Dental Surgeon, and an Ophthalmic Surgeon to that Hospital.

Sir Benjamin Brodie underwent the operation for extraction of cataract from the right eye on Monday. Our readers will be glad to learn that favourable reports were given of the progress after operation up to Thursday afternoon.

UNIVERSITY OF ST. ANDREWS.

MEDICAL EXAMINATION PAPERS, DECEMBER, 1860.

First Examination.

FIRST PART.

Translation from Latin into English.

Give the origin or primary meaning of the following words:—Artery, azote, diastole, lethargy, masseter, paralysis, sinapism, strangury, trochanter, zygoma.

SECOND PART.

CHEMISTRY.

1. What do you understand by specific gravity? Describe the methods of ascertaining the specific gravities of solids, liquids, and gases.

2. Give the process for the preparation of phosphorus: describe it; and enumerate the parts of the human body in which it is found in combination.

2. Write, in formulæ, the composition of the following substances:—

Red precipitate, borax, prussiate of potass, cream of tartar, oxalic acid; and state how the last two are obtained.

Second Examination.

ANATOMY AND PHYSIOLOGY.

1. Describe the ligaments connecting the first two cervical vertebræ with each other and with the occipital bone; and the muscles passing from each of these bones to the other two.

2. Describe the cœliac axis and its branches.

3. Describe the position and boundaries of the lateral ventricles of the brain.

What is known either from experiments on living animals, or from clinical observations, regarding the functions of the different parts of the brain?

4. Is the circulation of the blood in the capillaries influenced by any other agency than the contractile power of the heart and arterial system? What is known regarding the rate of movement of the blood in the arteries, capillaries, and veins; and regarding the force with which the blood is propelled from the left ventricle?

Third Examination.

FIRST PART.

MATERIA MEDICA.

1. What are the principal arguments in favour of and in opposition to general blood-letting in acute inflammatory affections?

2. In what morbid condition should wine and spirits be administered medicinally? What are the best indications for their administration in cases of fever?

3. State what you know regarding the therapeutic uses of electricity in its various forms.

4. How is oil of turpentine obtained? What is its action on the animal economy (1) in small doses, (2) in com-

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paratively large doses, and (3) when applied externally? What are its chief uses in Medicine? Write a Latin prescription without using symbols or abbreviations, for a draught suitable for a case in which you would use it.

SECOND PART.

(N.B.—In answering the practical questions, the Examiners require every Candidate to specify the mode of treatment which he is in the habit of adopting, and the doses of medicines which he prescribes.)

PRACTICE OF MEDICINE.

1. State the principal facts, so far as you know them, which show that impure drinking-water may cause disease. What diseases have been stated to be so produced, and what are the means to be adopted when epidemic disease is due to such a cause?

2. What are the remaining characters of a urinary sediment which is thrown down in a highly acid urine, in the form of colourless crystals soluble in the mineral acids? What forms of disease are frequently associated with this deposit? and what are the remedies to be employed?

3. Describe simple acute laryngitis, mention the diseases with which it is apt to be confounded, and give a short statement of the treatment.

4. Give the physical signs of pericardial fluid effusion, so as to distinguish this affection from others producing dull percussion of the præcordial region.

5. A man accustomed to active exercise, and pretty free living, is induced to apply for Medical advice by finding that he is unable to walk rapidly or far without painful breathlessness, and a sensation of sinking, to which vomiting is often superadded. He has also a little cough, and has once or twice expectorated blood. On auscultation, a murmur is discovered with the second sound of the heart at midsternum, and over the base. The pulse is soft, but full and bounding: the murmer is audible in the carotids; the heart's impulse is increased. What is the disease? Remark upon its probable causes and on the prognosis.

6. A child of two years old becomes fretful, shivers, and is feverish, pulse being 120 to 130. For twenty-four hours there is painful sickness, and the epigastrium is tender. During the next twenty-four hours there are one or two violent convulsions. On the third day all the symptoms are greatly relieved, and there is a crop of disseminated red acuminated papules on the skin. What is the disease, and what will be its probable course from this period?

Fourth Examination.

FIRST PART.

SURGERY.

1. Describe the various methods of arresting hæmorrhage, arterial and venous.

2. Describe the principal kinds of ulcer, and the treatment of each.

3. Describe the symptoms and treatment of rupture of the bladder and urethra.

4. A patient has a deep abscess pointing at the groin. What probably would be the other symptoms, and the prognosis and treatment?

SECOND PART.

MIDWIFERY.

1. Describe the phenomena of the second stage of labour in an occipito-posterior position.

2. What signs of pregnancy are available in the end of the third month of utero-gestation?

3. On the post-mortem examination of a woman dying during menstruation, what is observed?

4. After a fortnight of undefined illness, A. B., aged 6 years, complains of headache, is often sick and vomits, has constipated bowels, is somnolent, but the sleep is disturbed. What is probably the disease, and what its probable progress?

5. During the labour difficult in the second stage, sudden abdominal fixed pain comes on, there is great collapse, the labour-pains cease, vomiting of dark-coloured, fluid matter begins, and on a vaginal examination the presenting head is found to have somewhat retired while a little hæmorrhage at the same time flows. What is the nature of the case, and its probable progress?

REVIEWS.

A System of Surgery, Theoretical and Practical, in Treatises by Various Authors. Edited by T. Holmes, M.A. Cantab., Assistant-Surgeon to the Hospital for Sick Children. In Four Volumes. Vol. I. General Pathology. Pp. 825. London: 1860.

This is a work whose magnitude and importance justly excite the expectations of readers and reviewers; for such a work, if successful, must become at once the standard authority of the time, and mark an era in the history of Surgery and its literature.

We learn from the Preface that the "object of this book is to unite into a complete system the opinions and experience of many men, most of them Hospital Surgeons in London, and most of them writing on subjects of their own choice." It consists of a series of essays, each with the author's name appended, and arranged with adequate regard for convenience. Beginning with "Diseases which Affect the Whole System," it next takes "Injuries which either Involve the Whole or a large Part of the Body, or which may be met with in any Region;" and these two parts comprise the whole subjects of Surgical Pathology. The entire work is to consist of four volumes, of which the first is now before us, and the second promised immediately; the first containing nearly the whole of the subjects classified under the head of General Surgical Pathology, except gunshot wounds.

We are glad to find that the work opens well. The first essay, on Inflammation, by Mr. Simon, is one which is entitled to all the praise which a critic can give. It is largely, we may even say grandly, conceived and admirably executed. The logical order and arrangement of the matter, and the language, are alike excellent, and the latter is free from grandiosity or affectation. So thoroughly old and hackneyed does the subject of inflammation appear to most minds, so many elaborate and plausible theories have been spun like cobwebs only to be remorselessly brushed away, that one is almost astonished at the absolute freshness with which the old material is invested, when thus fused up and recast, whilst we gratefully acknowledge many novel interpretations, and some further additions to our knowledge of facts.

Mr. Simon is in his doctrine a *solidist*, not of the obsolete "action-of-blood-vessel" school, but one who traces throughout the processes of good health and bad health, the continual energy of those minute elements of our tissues, whose forces are exhibited in the embryo long before blood or vessels exist. He looks on inflammation as a process of increased textural activity (= Hughes Bennett's abnormal nutrition). As in the normal life of every texture there is waste and reproduction, so in inflammation these processes are exuberant, and not only exuberant, but perverted. Destruction of tissue is an invariable feature; it may be a rapid and palpable gangrene, or it may be slight softening and fatty conversion, but there it always is. Excessive reproduction, natural or perverted, varying from mere hypertrophy of normal tissue to the most confused and exuberant cell-growth, also always exists. The action of blood-vessels and the hyperæmia are not the causes, but the effect, of increased textural growth, just as they are when the womb enlarges in pregnancy. The inflaming tissue sucks the liquor sanguinis through the capillaries, which are thus loaded with stagnant particles. The liquid exudation with which the inflaming tissue has thus loaded itself, soon teems with growing forms, which are abortive "derivatives of the cell-forms of health." "Non-vascular" textures, as cartilage and the cornea, equally inflame with other tissues (relatively more vascular); their cell-growth is stimulated, and results in abortive production of corpuscles indistinguishable from those of pus. Passing over the redness, swelling, and pain, which are amply described. Mr. Simon gives an account of experiments made by himself, with the aid of Dr. Edmund Montgomery, with regard to the heat. He believes that he determined by an electro-thermic apparatus, that an inflamed part is warmer than the arterial blood which flows to it; that the venous blood which flows from it is warmer than the arterial, though not so warm as the focus of inflammation, and that it is warmer than the current in the veins of the opposite limb; therefore, that "an inflamed part is no mere passive recipient of heat, but is itself actively calorific."

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The feverishness and increased heat of the body at large are direct consequences of the increased production of heat and chemical change in the affected part:—

"If a part be developing preternatural heat, and undergoing preternatural change, its venous and lymphatic outflow must of necessity represent those excesses of heat and change; and this outflow with all its belongings, material and dynamical, shedding itself without interruption into the blood must straightway be diffused throughout the body."

And this, not inactively; for the influx of heated and chemically changing matters into the blood, sets afoot corresponding changes in that liquid, and in every tissue which it permeates, till every texture shares in the languor, the heat, and the wasting characteristic of feverishness. The microscopic changes in inflamed blood, and the question of hyperinosis are described as too obscure for positive description. The causes of inflammation are accurately sifted and discriminated, and it delights our eye to see one sign of the fall of the hoary bugbear "specificity." With regard to gonorrhœa, for example, Mr. Simon asks

"Whether it be anything more than a common inflammation of the affected membrane; an inflammation which, perhaps, first originated and may with infinite frequency re-originate from local accidents of dirt and lust; and which, being thus originated, shows a more communicable character than some other catarrhal inflammations,—than common cold in the head, for instance,—only because genitals come into inoculative contact more frequently than eyes and noses. In the writer's opinion there is ample reason to question the popular impression that only 'specific' inflammations are communicable."

He proceeds to illustrate these views by the example of ophthalmia. It is here evident that his sanitary studies have disabused his mind of the old "specific" doctrines under which dirt and disease have so long been fostered. On these and kindred points the Surgery of the Houyhnhnm has been for thirty years in advance of that of the Yahoo, as any one may see who will open Percival, or any other standard veterinary work on glanders.

But we must not linger any more over Mr. Simon's Essay, except to say that the treatment he recommends is untainted by either the late or the present prevalent heresy. "If," as he says, "treatment is to be indiscriminate, Medical advice is but a sham. And there may be death in the practices of Van Dunk, as well as under the prescriptions of Sangrado." A few pages of book references (they might have been doubled beneficially) complete the Essay.

The Essay which succeeds—on "Abscess"—may possibly suffer the disadvantage of proximity, and of the comparisons which are inevitable. It appears as if the writer had not sufficiently considered the scale of the composition, and certainly as if he had written discursively without due regard to method. It contains some interesting cases and practical hints, but on the treatment it is not sufficiently explicit nor full.

The third is an Essay of eight pages on Sinus and Fistula, by Mr. Paget. It is remarkable for the care and conscientiousness and the practical skill expended on a subject which is interesting, if not attractive.

The fourth Essay, by Mr. Holmes Coote, treats of Gangrene. It may be described as a practical paper, not at all distinguished by clear definitions, lucid arrangement, or precise style, and with many omissions; yet containing much that is useful. He seems to take sloughing phagedena, or Hospital gangrene, as a type of gangrene in general,—a selection which we think unfortunate, inasmuch as a definition which is evidently derived from this malady, as a "spreading, destructive process, attended by progressive loss of vitality in the living tissues," does not apply to cases in which gangrene is an absolute result (as of strangulation), and neither spreading nor progressive. Many clear thinkers altogether separate the *pourriture d'hôpital* from true gangrene, and we think they are right. Gangrene may result, but the process in its beginning is not gangrenous. Be this as it may, no one who knows the facts or literature of this disease can derive much satisfaction from a perusal of the five pages which Mr. Holmes Coote devotes to it, in which no space is given to the names or opinions of Guthrie, or Delpech, or Boggie, or Welbank. The *local* nature of the disease in the early stage of some cases is quietly set aside. A few interesting facts are given of sparse attacks of this disease in St. Bartholomew's Hospital and in private practice, but Mr. Macleod's "Surgery of the Crimean War" is chiefly quoted, and, as we apprehend, the character of the acute gangrene which affected the thigh-stumps after the affair of the Redan is misconceived. (Compare the Official "Medical and Surgical History" and Dr. Lyons's Report. The authors of the "Medical and Surgical History" say, "That this disease was not Hospital gangrene, as described by Guthrie, Boggie, Hennen, and others, in the Peninsula and elsewhere, and witnessed in the French Hospitals in the Crimea, all who were conversant with the aspect of those forms of disease, and who saw the present affections, at once admitted, from its appearance.") The senile gangrene is slightly—but perhaps sufficiently—described, and the treatment recommended is that followed by all judicious Practitioners.

The Essay on Ulcers, by Mr. Paget, is replete with the marks of careful observation, and leaves nothing to be desired in respect of the fullness with which every useful detail is given. The *mouths of the absorbents* are now, we hope, for ever released from the task of eating the animal tissues into holes, and ulceration is definitively entitled a liquefactive process. We well remember the horror that was excited in the minds of some of the Examiners of the College of Surgeons, twenty years ago, by this rebellious denial of the "doctrines of the immortal Hunter." Mr. Paget classifies ulcers, first, according to the peculiar diathesis or cachexia with which they may be connected; and here we notice a well-marked but hitherto undescribed variety, which he speaks of under the name of *cold ulcer*,—the small, but exquisitely painful sore liable to form on the fingers and toes of young women whose hands and feet are habitually cold and damp. He remarks, by-the-by, that a thermometer put into the wound made by dividing the tendo Achillis of a cold-footed young woman, marked only 70°, the atmosphere being 65°. Mr. Busk contributes a good account of the ulcer of scurvy, derived from his *Dreadnought* experience. The strumous, leprous, syphilitic, and cancerous ulcers follow; lastly, such as owe their peculiarities to local or accidental causes.

Mr. Campbell de Morgan's Essay on Erysipelas is tolerably full, and clearly written, and on the subject of Treatment bears many marks of practical sagacity and observation. The account of the phenomena of the more common forms of the disease is well put together, except that a more complete account of the "diffuse cellular inflammation" which he associates with it might fairly be expected. In speaking of the sesquichloride of iron, which has been largely tried at Mr. de Morgan's Hospital, he says, while admitting occasional failures, partly from internal organic disease, and other less precise causes, "that it will do, in the majority of cases, what no medicine of any other class has ever yet been found to do, namely, cut short the disease." "In the records of failure it is evident that often the medicine has not been fully tried. In a recently-published lecture, by Dr. Parkes, for example, he expresses the opinion from his own experience, that the iron exerts no power over the disease. In one of the cases, however, ten drops were given three times a-day; in another, three drachms were taken in all." But these quantities were inert; less than a drachm and a-half, or two drachms per diem, will rarely affect adults.

Here we must pause, and next week take up the "System of Surgery" again, and describe the remaining contents of the First Volume.

Bronchitic and Peptic Asthma; Their Successful Treatment. By William Macleod, M.D., F.R.C.P., Senior Physician to Ben Rhydding. Pp. 23. Edinburgh: 1860.

Dr. Macleod borrows a short description of the nature and pathology of asthma and pulmonary emphysema from Dr. Gairdner and Dr. Salter, and then details the remedies which he has found successful. He appears to be the Senior Physician to a Water-Cure Establishment in Yorkshire, and, as may be expected, he divides his remedies into the following:—The Compressed Air-bath; the Internal and External Use of Water; Medicinal Remedies; Diet; Residence.

We are prepared to find that the residence he recommends is Ben Rhydding,—only two of the "numerous asthmatic patients" who have resorted to it during fourteen years have been unable to remain there. The diet prescribed is light, nutritious, and common-sense enough. Medicinal remedies are

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stated to be, not only useless, but mischievous, with the exception of stramonium; and the remark is made, and deserves attention, that when stramonium fails, it is because the sample of the herb is worthless—yet he also sometimes uses the nitre paper, and prescribes the hypophosphite of iron and manganese. The internal and external use of water, with Roman and other various forms of baths, are described as necessary to the cure of the asthma, or at least to the renovation of the patient; and we believe, and thankfully acknowledge, that the cold water compress is a most valuable remedy in chronic bronchitis and many other internal congestions. But it is very evident that all these remedies combined have not been so successful as not to leave room for a new one; and as the compressed air-bath is one of the newest remedies, and our readers may not be familiar with it, we extract the account which Dr. Macleod gives of its construction and uses. As for its *modus operandi*, our author borrows what suits him from Dr. Gairdner, to explain it.

Before proceeding to give the promised quotation, let us ask our readers' attention to one remark. It is very fine to sneer at orthodox physic, to descant on the uselessness of drugs, and on the advantages of Institutions like Water-Cure Establishments, where every variety of air, exercise, water, baths, and diet, in addition to *leisure*, are available; yet really the Water Doctors leave to their less fortunate orthodox brethren all the trouble of scientific research, and of preparing exact records. Dr. Macleod speaks of "*several* cases of bronchitic asthma;" of "frequently" seeing the most stubborn bronchitic state removed, etc. etc., but we get no detailed cases; nothing exact; and we are quite in the dark as to the duration of treatment and permanence of cures. Be it observed, too, that novelty is an essential recommendation in the remedies in vogue at these establishments. The tonic must be "hypophosphite of iron and manganese,"—the newest form,—and, spite of fourteen years' successful treatment, remedial applications with the *prestige* of novelty are eagerly added to the apparatus.

"The Compressed Air-bath owes its origin to M. Emile Tabarié, of Paris. That gentleman, by a series of carefully-conducted experiments carried over a number of years, united to great mechanical skill and ingenuity, not only designed the bath, but showed, with some minuteness and detail, its effect upon the human frame in health and in disease.

"The air-bath is a chamber constructed of iron plates riveted together like those of the boiler of a steam-engine, so as to be perfectly air-tight. It is provided with double close-fitting iron doors, and four windows, each a foot and a-half in diameter, and composed of a single piece of strong plate-glass. The interior is lined with wood, is furnished with seats and a couch for weak patients. The bath is ten feet in diameter, and twelve feet high. The doors are so arranged that the patient can come out of the bath without affecting the pressure in any way, and the physician can enter and leave the bath at any time also without affecting the increased pressure of the air in the bath. A seven horse-power steam-engine works, at the rate of fifty strokes per minute, a force-pump seventeen inches in diameter and two feet deep, from which there passes an iron pipe four inches in diameter. This pipe opens into the bottom of a large cylinder. In this cylinder are several diaphragms pierced with numerous small holes. With the top of the cylinder a pipe, also four inches in diameter, is connected, and, after running about two hundred and fifty yards underground, opens into the air-chamber beneath the floor, which is pierced with numerous small apertures. By this arrangement the air enters the bath without the patients being aware of any current of air. A large screw valve is attached to the entrance pipe, which regulates the access of air to the bath. From the roof of the chamber, an iron pipe, four inches in diameter, is carried down outside the bath into a dry drain, to deaden any noise occasioned by the rapid current of air. This is the exit-pipe, and is furnished with a large screw valve, by which the amount of air passing off is regulated. While the air is being condensed, and after it has been brought to the maximum pressure desired, a sufficient quantity of air constantly enters and escapes from the bath, so that the patient never breathes the same air twice. Barometric tubes, made duplicate, in case either should fail, and placed within the bath, communicate at their upper extremities with the atmosphere outside, while the mercury at the lower end is subjected to the pressure of the air in the interior. The patients are constantly made aware, by the indexes, of the amount of pressure, which is regulated by the valve in the escape-pipe. An apparatus, by which the temperature of the air entering the bath is regulated, is also attached. The air which is forced into the bath is the ordinary atmospheric air drawn from the moors. Whilst it is being forced along a pipe 250 yards long, with a pressure of seven and a-half pounds on the superficial inch, a great proportion of the water is necessarily squeezed out of it. Consequently the persons in the bath breathe a pure, compressed, and comparatively dry atmosphere. The duration of each bath is usually two hours. During the first half hour the pressure of the atmosphere is gradually raised at the rate of one pound every four minutes. The maximum pressure is then kept up for an hour, and during the next and last half hour it is allowed gradually to diminish, until the normal state of the air is regained. The slowness in the increase and diminution of the pressure is of fundamental importance in the use of the air-bath as a curative agent. The patient ought to sit erect in the bath, and to take frequently deep and full inspirations. He ought to keep quiet, and as free as possible from every sort of excitement or worry; and, should he feel drowsy he ought to allow himself to fall asleep.

"In the bath, the respiration becomes slower, fuller, and deeper; and less need is felt for continuous breathing than in an atmosphere of the usual pressure. There is at the same time a feeling of comfort in the lungs, and an unusual facility of breathing. These effects arise from the sedative action of the bath—an action which gradually extends over the whole frame; so that a calm, quiet, equable sleep is often produced during the sitting. This sedative influence is often shown in a marked degree in persons suffering from asthma. Each inspiration becomes less laborious, and the imperious and incessant demand for air less claimant, until at length the patient breathes easier, freer, and deeper than he was able to do before going into the bath.

"The manner in which the compressed air-bath produces this most important result, is, I think, satisfactorily explained by the mechanism of respiration. The general principle of its operation is this:—The lungs are suspended in a cavity that is completely closed, being bounded above and around by the bony framework of the thorax, the interspaces of which are filled up by muscles and membranes; and being entirely cut off from the abdomen below by the diaphragm. Under ordinary circumstances, the lungs completely fill the cavity,—their internal surface, covered by the pleura, being everywhere in contact with the pleural lining of the thorax. But the capacity of the thoracic cavity is susceptible of being greatly altered by the movements of the ribs, and by the action of the diaphragm and of the abdominal muscles. When it is diminished, the lungs are compressed, and a portion of the air contained in them is expelled through the windpipe. On the other hand, when it is increased, the elasticity of the air within the lungs causes them immediately to dilate, so as to fill the vacuum that would otherwise exits in the thoracic cavity, and a rush of air takes place down the air-tubes towards and into the air-cells, to equalize the density of the air they include (which has been rarified by the dilatation of the containing cavities) with that of the surrounding atmosphere. Now, the compressed air not only stops, more or less entirely, the increased secretion of mucus and the spasmodic contraction of the bronchial tubes, but it also adds an increased pressure of seven and a-half pounds to the inspired air, so that it rushes with proportionate increase of impetus into the air-tubes, and in this way helps gradually to force open the collapsed air vesicles, so as to enable them to resume their proper functions."

We must add that although the use of the bath is a novelty, the thing itself is old. It seems, as we learn from a little tract by Dr. Grindrod, of Malvern, to have been described by Dr. Henshaw, an English Physician, in 1664: meanwhile, a case related at p. 422 of our last volume shows that it has of necessity its risks, although Dr. Macleod says nothing of them.

ARSENIC IN COAL.—Dr. Angus Smith found this metal in thirteen out of fifteen specimens of Lancashire coal which he examined; a fact which has a very distinct bearing on our sanitary knowledge, as we must now add arsenic to the number of impurities in the atmosphere of our large towns.

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PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

ON TWIN BIRTHS.

By Professor SPAETH.

Professor Spaeth, of Vienna, states that among 14,880 births at his Clinic, twin-births have been observed 185 times (1 in 80), viz., 135 times in pluriparæ, and 50 times in primiparæ. In the great bulk of the cases when the patient had been seen during pregnancy, or while the pains still continued feeble in actual labour, the fact of twin-pregnancy was determined with a certainty prior to the birth of the first child. In one case, while during an examination, the loose bones of a macerated cranium could be felt, the pulsation of a fœtal heart was heard at the abdomen of the mother. In two cases two bags of membranes, each containing a fœtus, presented simultaneously at the os uteri, the point of junction between the two happening just to fall on the orifice.

With respect to the *placenta* it is to be observed that in only three cases was that belonging to the first child discharged prior to the expulsion of the second child. This organ was carefully examined in 126 instances. In 49, there were separate placentas with 2 chorions and 2 amnions; in 46, united placentas with 2 chorions and 2 amnions; in 28, united placentas with 1 chorion and 2 amnions; in 2, united placentas with 1 chorion and 1 amnion; and 1 case was doubtful, on account of the parts being torn. In the instances of double chorions no anastomoses between the vascular circles of the respective funes of the conjoined placentas could be detected; but in cases in which only one chorion was present, whether with a single or double amnion, the vascular anastomoses were plainly present.

The *sexes* were similar in more than double the number of instances in which they were different, since of 185 cases the twins were only of different sex in 56. Comparing this statement with the 126 placenta examinations it is found that of the 49 instances with separate placentas, 32 of the children were of the same, and 16 of different sex. Among the 46 cases of united placentas and double chorions there were 26 of the same and 20 of different sex. The 31 cases, with a single chorion, were all of the same sex. As the Professor's observations agree with those of other authors, he comes to the conclusion that in instances of united placentas, with one chorion, the sexes of twins will always be found alike.

As to the *amount of development*, in 176 of the 185 cases, the children were born alive; and in 62 instances at full time, *i.e.*, they had been carried until the completion of the thirty-eighth week of pregnancy. In 6 instances the children could not be regarded as viable, while in 108 they were before time, but viable. In most instances the children were of unequal size, so that, in 66 instances in which measurements were taken, they were found to be alike only in 3. Of the 8 instances of death, 4 are returned as from undiscovered causes, 3 from torsion of the funis, and 1 from fibrinous deposit in the placenta. That the two ova of a twin gestation, or the two halves of a twin ovum may manifest a high degree of *independent development*, is well known. Not only the fœtus, but the secundines are usually developed in different degrees. While the one ovum may have degenerated into a vesicular mole, the other may undergo its normal development; and while one ovum may give rise to some variety of excessive malformation, from the other may spring an excellently formed fœtus. The author's cases supply several proofs of the prevalence of this law, not only among twins having separated placentas, and as completely separated ova being more likely to exhibit their independent development, but also among those in which the intimate union of the secundines seemed to indicate the presence of two halves of one ovum. In one instance observed, in which there were united placentas and two chorions, the uterine surface of one of the latter exhibited numerous small calcareous concretions, while that of the other was entirely free of these; and in several instances, in one of the twin placentas, extensive fibrinous deposits were observed, which were entirely absent in the other. Still plainer speaks for this independent development of each half of the ovum the case in which one fœtus dies while the other goes on to its normal period, although the vascular anastomoses may be numerous and pervious.

Professor Spaeth terminates his paper by a long disquisition upon the question how far this report on twin births illustrates the doctrine of superfœtation. Our space does not admit of noticing this, which is of the less consequence, as he comes to quite a negative conclusion upon the matter.—*Zeitschrift der Gesell. der Aerzte zu Wien*, 1860, Nos. 15 and 16.

ON THE EMPLOYMENT OF APIOL IN AMENORRHŒA AND DYSMENORRHŒA.

By M. JORET.

During the investigations into the antiperiodic power of apiol, carried on some years since by the author and M. Homolle, they had occasion to note its emmenagogue power, and subsequent trials have proved it to be not only one of the most active and most certain, but also a very harmless emmenagogue. In his preliminary observations, the author strongly insists upon the important precept that the treatment of amenorrhœa and dysmenorrhœa must be based upon an exact appreciation of the cause, thus:—1. When the cause is plethora, general or local bleeding, baths and emollients are the best emmenagogues. 2. When it depends upon a chloro-anæmic condition, whether spontaneous or accidental, martial preparations, good diet, a healthy abode, and exercise in the open air are the means most likely to act in restoring the menstrual flux. 3. When the disturbance of menstruation is connected with general nervous excitability, prolonged cold baths should predominate in the treatment. 4. But when the cause is a deficiency of general nervous stimulus, or of that localised in the genito-uterine apparatus, a perversion in the vitality of this apparatus, and especially of the ovarian sensibility, the stimulants termed emmenagogues are indicated; and it is in these cases, which are very numerous in practice, that apiol seems to possess decided superiority to any other means. 5. In those complex cases, in which several causes seem to combine in the production of the amenorrhœa or dysmenorrhœa, we should combat the various general or local conditions already adverted to before having recourse to emmenagogues.

Not only must we first investigate the nature of the cause of the amenorrhœa or dysmenorrhœa, but also determine the exact time at which the emmenagogue should be administered. This should be always at the period at which menstruation ought to return. There may be difficulty in exactly fixing this, especially when the menses have been long absent: but there are almost always symptoms arising from a congested state of the uterus which will sufficiently fix the period for commencing the remedy. The apiol may be given in capsules, each capsule containing four grains of apiol. Generally a capsule is given morning and evening, with a little sugared water. These are continued during the four or five days of the menstrual epoch. The month after, and even the third month, if menstruation has not become sufficiently abundant and quite regular, exactly the same procedure is to be observed. As a general rule, the menses appear more or less abundantly after the first course of doses, and it is rare for the medicine to be required to be taken after the third month. In dysmenorrhœa precisely the same course is to be observed. M. Joret quotes several cases exhibiting the decided efficacy of the apiol in primary amenorrhœa, or deficiency of secretion; in accidental amenorrhœa, or suppression, and in dysmenorrhœa.—*Bulletin de Thérapeutique*, tome lix. pp. 97—113.

ON FATAL TWISTING OF THE FUNIS.

By Professor BILLI.

Dr. Billi, Obstetrical Professor at the Milan Lying-in Hospital, gives in this paper the particulars of a remarkable case of twisting of the funis, in addition to two others which he has already communicated to former numbers of the same Journal. By the first of these latter he believes that he established the fact that knots of the funis may so closely constrict this organ as to cause the interruption of the circulation through it and the death of the child. The second paper related not to a case of knotting, but of twisting of the cord, likewise inducing the death of the fœtus. About the middle of the eighth month of pregnancy, the fœtal movements became excessively violent and so continued for about eight days, when they suddenly ceased. Two days after this the breasts became tumid, and there was febrile action.

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Labour-pains came on a month and a-half after the fœtal movements had ceased, and the woman was delivered of a fœtus in an advanced state of maceration, the funis being twisted upon itself in an extraordinary manner. The portion of the funis within half-an-inch of its insertion was, in consequence of the twisting, reduced to six lines in circumference, and resembled a tendon in colour and consistence. Water, when forcibly injected, would not penetrate this narrow portion of the funis. The author, as well as other obstetricians, has met with cases of twisting of the funis upon itself, without any injury to the fœtus; but he believes that the great amount of it, here noticed, so great that it was not possible to completely untwist it, can only have resulted from rotatory movements performed in one direction, which in this case would be favoured by the large size of the uterus. Endeavouring to explain the cause of this rotatory movement, the author states that the left lobe of the cerebellum was found to be a fifth smaller than the right, and suggests upon physiological grounds that this may furnish an explanation of the production of rotatory motions in one direction which gave rise to the twisting in question.

A third case which has come under the author's notice now enables him to pursue the subject. Ceasing to menstruate in June, the woman, a primipara, first felt the fœtal movements towards the end of October; and, by the middle of December, they had become so violent that she had to seek Medical assistance on account of them. By the Practitioner consulted these movements were compared to those of a wheel violently turned within the abdomen. After continuing with unusual violence for a week they suddenly ceased, and were not felt again, nor did the abdomen continue to increase in size; the breasts, however, became painful and distended for some days. A fœtus in an advanced state of maceration was born at the end of February. The placenta, which was slightly atrophied, weighed 7 oz. troy, and measured 16 inches in circumference. The funis, twisted upon itself, was 12 inches 6 lines in length. For 11 inches, and 8 lines from its placental insertion, it was large, measuring 2 inches 3 lines in circumference, but for the remaining 10 lines, to its umbilical insertion it did not exceed *two lines* in circumference, resembled tendon in consistence, and was impervious to injection of water. On examination of the cranium, the proportion of the cerebellum to the cerebrum was found to be a fifth less than it should be, the former being also more softened, and especially so on the right side.

Professor Billi then, reasoning from the deductions derived from experimental physiology in respect to unilateral lesions of the cerebellum, concludes that in these two cases the circular fœtal movements resulted from the irregular distribution of the nervous power of the cerebellum over the muscular sense. In the one case this was due to a changed condition of one of its lobes, and in the other to a preponderance of such change in one of these. The vast difference in size between the twisted portion and the remainder of the funis was due to the obstruction in the circulation in the former, and the consequent distended condition of the latter. The author reproduced the same condition experimentally by imparting circular movements to a fœtus recently dead, while water was at the same time injected into the umbilical vein and descending aorta. The funis was 20 inches long and 12 lines in circumference. After the twisting, it became reduced for an inch of its length from the fœtal insertion to 9 lines in circumference, and was also then rendered impermeable. In the other 19 lines of its length the circumference of the funis was increased to 20 lines. *Omodei's Annali*, Vol. 178, p. 608.

EUNUCHS.—"Castrated persons have many defects which are peculiar to them; they have a bad odour, a yellow colour, furrowed cheeks, and feminine voice; they are unsociable, deceitful, and rascals, and are never known to practise any human virtue."—*Cours d'Operations par Dionis.* "Eunuchs are the vilest creatures of the human race; cowards and deceitful, because they are weak; envious and spiteful, because they are unfortunate." — *Benoit Majon.* J. E. Beauvoisins says: "Black eunuchs are brutal animals, without any instruction, and live like wild boars in their lairs. These ferocious animals seem to think they may do what they please, and are ready to sabre those who do not get out of their way. White eunuchs are less savage."

PROVINCIAL CORRESPONDENCE.

SCOTLAND.

EDINBURGH, January, 1860.

A HAPPY New Year to your readers, and many of them; and if it will not disarrange any meteorological arrangements, it would perhaps be advisable that the weather should, for the future, be a little milder. Here we have been enjoying an Arctic winter: three weeks of hard frost. A fall of snow, which lay more than a foot deep after one night, and was repeated at bed-time for nearly a fortnight, has kept the inhabitants of this city in a constant conflict between their keen appreciation of the picturesque and their as keen sense of discomfort.

Along both sides of every street was a four-feet-high snow-wall, hard as that of China; in the roadway were a foot and a-half of, apparently, brown sand, which blew about, and seemed to need watering; but was really dirty snow, the particles of which, in mutual disgust, kept aloof from each other. On the house-tops lay avalanches, ready at the slightest provocation to descend on the passers-by.

Inside the houses dirt prevailed, because there was no water; but, with the natural delicacy which pervades the laws of Nature, the gas-meters went wrong too, so it was not easy to detect ablutionary deficiencies through an uncomfortably cold fog.

But now the fog rises, and the bright winter sun shows us the Frith, and cheers up the old place; even Sir Walter Scott, on whose head a starved-out-gardener sparrow has been sitting, brightens up, and the latter flies into the garden at his back. Yes, it's a better day than we thought, we'll cross the North Bridge and go up to the Schools. There has not been anything very novel lately in the Surgical Hospital, though of course such a huge establishment always contains some interesting cases. In the Medical department Dr. Warburton Begbie has had some very successful cases of paracentesis thoracis, an operation which seems daily to become more common and more successful.

Among the branch educational charities, the Sick Children's Hospital in Lauriston, is worthy of notice. It is a good, roomy house, with a garden attached, clean airy wards, with every appliance that can render the treatment efficient and make the little inmates comfortable. At noon the House-Surgeon sees the out-patients, and reserves the most interesting cases till one o'clock, when the Visiting Physician goes round the wards. With such a man as Graham Weir to pilot it through its first difficulties, this little Hospital will, no doubt, become very useful as an additional means of instructing the swarms of Students which collect in this very educational city. At no time were the classes more fully attended, the Anatomical rooms are full of subjects,—it is well they are, considering that there are nearly 400 pupils in Professor Goodsir's class, and any member of it who does not learn Anatomy must have mistaken his calling.

The present arrangements for Anatomical teaching are very complete. There are two large dissecting-rooms, and one bone-room in which are the bones, ligaments, arterial dissections, and models of the brain, eye, ear, etc., for reference,—to this room, the first year's Students repair in sections, and are tutorially instructed in the more elementary parts of Anatomy; beyond this is another smaller, dark mysterious, lamp-lit chamber, fitted up at great expense by Professor Goodsir, for the systematic teaching of Microscopical Anatomy: here Dr. Turner the Senior Demonstrator, meets the first year's men twice, and the second once a-week, and exhibits the wonders of minute structures. At two p.m., the Professor lectures, and at four Dr. Turner again demonstrates from the dead body.

All day Drs. Cleland and Wilson are at work in the dissecting-rooms, which are also frequently visited by Mr. Goodsir himself, who comes to the College at nine a.m and generally stays till five p.m. Dr. Struther's class is also crowded, and has the benefit of that gentleman and his assistant's almost undivided attention.

Many of your readers must be old Edinburgh men, to them I tell with sorrow that our old friend John Arthur died on January 11 of some abdominal disease. To those

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who knew not John, I would also tell that he was connected with anatomical teaching in Edinburgh for nearly forty years, that he first came here to be treated for the effects of a severe accident, that when,—thanks to Heaven and Liston,—he recovered, the great Surgeon's quick eye remarked his neat hands and instructed him in the difficult and valuable art of making preparations, John soon became not only an expert manipulator but a most accomplished anatomist, could articulate the skeleton of anything or anybody, make coarse or fine injections, and put up dry or wet preparations. He came to the University rooms about thirty-five years ago under Monro Tertius, and was principally in those days engaged about the Museum; but since 1845, when Mr. Goodsir's appointment as Professor of Anatomy, drew a yearly-increasing crowd of students to the rooms, John has been wholly occupied in preparing and allotting the subjects. He was always at his post, and prospered as he waxed old. Moreover, he was withal so kind in his manner, such a Nature's gentleman, so obliging, had such *savoir faire* (ay, and *savoir vivre*) that he exerted considerable influence in the place. Now he is gone we all miss the spare tall figure in the long black surtout, the handsome Rembrandt face, with high nose and thin, smiling lips; his white hair still curling crisply from under the black velvet skull cap, as he moved between the tables seeing that proper respect was paid to both dead and living, now taking the scalpel from some young hand and cleaning a bit of muscle, now turning over some well-picked part, to see whether it was worth adding to his extraordinary collection of *disjecta membra*. Verily, King Arthur thou wast a goodly king, and an excellent specimen of the rigid, upright, shrewd Scotsman, who

> "Breaks his birth's invidious bar,
> And grasps the skirts of happy chance,
> And breasts the blows of circumstance,
> And grapples with his evil star."

At the Medico-Chirurgical Society on Wednesday night Dr. Stewart, a new member, read an able paper on Starchy or Amyloid Degenerations of the Kidney. Drs. Gairdner, Bennett, Haldane, and Keiller discussed the subject. It seems these starch-like granules do not generally turn blue on the addition of iodine, and, therefore, Professor Bennett is reluctant to call them amyloid, unless the "oid" is expressed in italics. The practical point of Dr. Stewart's paper was that in amyloid degeneration the quantity of urine is increased, while in fatty degeneration it is decreased; but it seems to me that fat has, like gold and bronze, had its day, and that we are gliding—imperceptibly, but surely—into an age of Starch. With this melancholy reflection I conclude my epistle.

GENERAL CORRESPONDENCE.

RAPID BIRTH.

LETTER FROM DR. CARSON.

[To the Editor of the Medical Times and Gazette.]

SIR,—I was called out of bed in a great hurry one night to see Mrs. ——. Fortunately I had not far to go. On my arrival I learned that my patient had been roused out of a sound sleep with a feeling of urgent necessity to go to the close-stool. The moment she placed herself on the stool a violent labour-pain came on and the baby was born. Her friends were so much alarmed that they could render no assistance, and the baby would have been drowned in the water had it not been for the timely aid of a sensible lady who happened to be staying in the house that night. She got the patient gently raised to the edge of the stool and then supported the child on her hands till I arrived.

Cases of this description are worthy of being recorded, as they are of great importance in a Medico-legal point of view. I have a very distinct recollection of another instructive case which occurred under my charge when I was residing in one of the Dublin Lying-in Hospitals in the year 1834. The nurse called me to the bedside of the patient, as the labour was very strong, although she had not been more than half-an-hour ill. By one violent effort the child and placenta were expelled together, and the waters were not discharged. I tried to rupture the membranes with my fingers, but in vain. They were so unusually thick and tough that I had to open them with the scissors. I am quite confident if this woman had been alone at the time, her child would have been lost. Instances such as these should make us careful as to the conclusions we arrive at in investigations regarding infanticide.

I am, &c.

JAMES C. L. CARSON, M.D.

Coleraine, Ireland, January 8.

COMMITTEES OF INVESTIGATION.

[To the Editor of the Medical Times and Gazette.]

SIR,—The last meeting of the Medical and Chirurgical Society, presented a singular and characteristic episode, which may well be found occupying your able pen in its further illustration.

One of the Surgeons to the Royal Humane Society, sought the counsel of our learned body as to the means to be adopted for the recovery of persons apparently drowned, and stated the practice which had been sanctioned by the Society which he represented. He said that he was induced to bring forward the subject, because his practice was entirely opposed to that recommended by the late Dr. Marshall Hall, a practice known as "The Ready Method," and one which had been warmly advocated by a part of the Medical press and by many members of the Medical Profession.

The rules of two Societies, each founded with the most laudable objects, were circulated at the meeting. The one set of rules prescribed changes of position from the prone to the lateral. The other implied that this could do no good and may do much harm. The one set prescribed the use of the warm bath and heat; the other asserted that this practice was absolutely destructive. Under these circumstances, a suggestion was made by Dr. Quain that the Society should appoint a Commission or Committee to investigate the subject.

The President ruled that this suggestion was not in order and could not be spoken to. It might be said that he was right, for there was no precedent for such a proceeding. It may with greater force be answered that it was time to make a precedent. The French Academy of Medicine has constantly issued Commissions of Inquiry. I recall this fact more particularly as the reviving energies of the Medico-Chirurgical Society indicate a desire to take this learned body as a model. Nearer home, the British Association has committees always engaged in pursuing scientific inquiries. We are indebted in a great measure to one of these committees for all we know about the sounds of the heart. Still nearer to us we see the Pathological Society, with which the Medico-Chirurgical Society is so anxious to form a closer acquaintance, appointing committees to examine various subjects brought before it, and with the best results. How could the Medico-Chirurgical Society apply its abundant funds or use the ability of some of its learned Fellows for a better object than in ascertaining the means best adapted for restoring suspended animation? If the public cannot obtain such information from this learned body, to whom can it appeal? Let any of your readers obtain the rules of the Royal Humane Society, and those published by the Society for the Preservation of Life from Shipwreck. Let them compare the broad discrepancies which these rules present. Let them conceive the scene which would result, if over a rescued body persons possessing these different views, sought at the same time to put them into operation, and let them know that the Society of Medical men, assuming to take the highest place in this country, was unable or unwilling to assist in removing the doubts which clouded this most important question, let them thereupon consider the opinion which must be formed of our Society, and the Profession which it represents.

I am, &c.

A FELLOW OF THE R. M. & C. SOCIETY.

January 23.

SPECTRUM ANALYSIS OF LONDON WATERS.—Thames water taken at low and high tide, Westminster Bridge, samples from the Chelsea and Lambeth Water Companies, from the New River, from the wells above the London clay, from the sand above the chalk, and from the chalk, have been submitted by A. and F. Dupré to spectrum analysis, by the beautiful method of Bunsen and Kirchhoff, and in all cases lithium and strontium were detected.

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REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

TUESDAY, JANUARY 15, 1861.

DR. COPLAND, President, in the Chair.

The PRESIDENT thanked the Society for the honour conferred on him by his election; that honour was much enhanced by the fact that the position had been previously occupied by men so distinguished as his predecessors. He would in return endeavour to discharge the duties of his post to the utmost of his ability.

Mr. CANTON exhibited

BONES FROM AN OLD FEMALE DWARF.

The specimens were taken from the dissecting-room. They were interesting as illustrating the conditions of the various parts of the skeleton in the true dwarf. There was no appearance of rickets. The head, as is generally the case, was large, and all the rest of the bones of the skeleton were small, but in proportion one to another. In very tall subjects the head is proportionably small, being the reverse of what occurs in the dwarf. This is well seen in the skeleton of the Irish giant, in the Museum of the College of Surgeons. Another point of remark was, that in the bones of the dwarf the various prominences, ridges, etc., on the bones were well marked. This being again in contrast with the bone of the giant in which the prominences and ridges are not so well marked.

Mr. CROFT exhibited a specimen of

CALCULUS IN THE KIDNEY.

The kidney was sacculated, and very little of its secreting structure was left. The calculus was impacted in the pelvis of the kidney, and the ureter below was much contracted. The specimen was taken from a woman, aged 33. She had had symptoms referrible to the disease for three years. She at first had muco-purulent discharge with the urine, and some pain on micturition. She did not, however, apply for Medical advice. One year later she began to suffer severe pain in the left loin. A year before her death she had an attack of shivering, lost flesh, and still had a constant drain of muco-purulent discharge. She appeared to die of asthenia. The calculus consisted of oxalate of lime, encrusted by triple phosphate.

Dr. WILKS exhibited specimens illustrating

CHANGES IN THE HEART IN MITRAL CONTRACTION.

Dr. Wilks remarked that he did not think, in the description of the changes which took place in the cavities in the heart, that the corresponding alteration of the vessels was sufficiently noticed; that in mitral contraction where the left ventricle was often of small size, the aorta would be proportionally diminished, and more especially that the pulmonary artery would increase in volume with its ventricle. The present specimen from a growing youth showed these alterations remarkably well. The two vessels had relatively changed place as regarded the size and strength of their walls. This condition of the pulmonary artery was no doubt connected with an increased intensity of the second sound of the heart as pointed out by German Physicians, as occurring in contraction of the mitral valve. From the increased difficulty of the pulmonic circulation in such cases, there was greater recoil on the pulmonary sigmoids, and thus an exaggeration of the diastolic sound. Dr. Wilks believed the fact to be as stated, and also that if the heart be carefully examined after death, an increase in the size and strength of the pulmonary artery would be found.

Dr. WILKS next showed a specimen of

RUPTURE OF AN ANEURISM OF THE AORTA WHICH HAD BECOME AGAIN CLOSED.

The specimen came from a man, aged 60, who died in Guy's Hospital under Dr. Wilks' care. On admission, he was suffering from dyspnœa, dropsy, and all the usual symptoms of advanced cardiac disease. On auscultation, however, only the faintest bruit could be heard over the valves. Two days afterwards, the patient was found to have acute pericarditis, and the well-marked physical signs of this continued for some time, when they disappeared, and the patient resumed his original condition. The dropsy, however, increased, and he slowly died. The post-mortem examination showed that the symptoms were due to an aneurism of the ascending aorta, which had caused considerable pressure on the pulmonary artery, and that the pericarditis was owing to a rupture of the aneurism into the pericardial sac, but this not of sufficient extent to constitute a fatal hæmorrhage. About half-an-ounce of grumous blood was found mixed with the lymph.

Dr. BRISTOWE, mentioned a case somewhat similar, recorded in the *Transactions* of the Medico-Chirurgical Society for 1860.

Dr. WILKS also showed a specimen of

BONY PLATES IN THE SUBSTANCE OF THE HEART.

This heart was taken from a man, between 70 and 80 years of age, who died from the effects of an accident, but who never had any symptoms of cardiac disturbance. Nearly the entire front of the heart was composed of bony or earthy walls.

Mr. BRYANT then exhibited the skull-cap of a patient who had been

TREPHINED FOR EPILEPSY.

The case is fully recorded in our Hospital Reports for August 18, 1860, and in our report of the Pathological Society, at page 595 of the same volume, is an account of other specimens from the same patient.

Dr. WILKS then gave the particulars of a case of epilepsy which had apparently been caused by a tumour. In this case Dr. Addison had diagnosed that the disease depended on some such cause, as during the fits the unconsciousness had not been complete. Dr. Wilks had found great benefit in epilepsy from the administration of the bromide of potassium. He believed that it acted in a similar manner to the iodide of potassium, and was probably useful in the class of cases in which epilepsy was caused by local changes, as by syphilis, etc.

Dr. COPLAND alluded to the opinion of the seat of epilepsy being the medulla oblongata. He remarked that disease of the membranes would produce a form of epilepsy attended by slight loss of consciousness, but if the cause were seated deeper, the loss of consciousness would be complete.

Dr. MURCHISON gave the particulars of a case in which severe epileptoid fits occurred in a patient who was at the time suffering from nodes on the head. He had had primary syphilis two or three years before. When Dr. Murchison saw him he had been ill two or three weeks, and had had ten or twelve fits. Dr. Murchison did not remember whether the loss of consciousness was complete or not. The iodide of potassium, in doses of five grains three or four times a-day, was given. The man only had two or three fits after. The nodes disappeared, and for eighteen months, during which time he was under observation, he remained well.

Mr. WILLIAM ADAMS referred to a specimen in St. Thomas's Hospital. It was a piece of the skull-cap removed by Mr. Cline from an epileptic, by the trephine. On the cerebral surface there was a spicula of bone which had irritated the brain: after its removal the fits ceased. Subsequently Mr. Green trephined a child who suffered from symptoms like epilepsy and catalepsy, following an injury to the head. Over one of the parietal bones was a fissure, and the bone appeared in one part depressed. There was no cause of pressure found. The dura mater was lacerated, and the brain exposed. Hernia cerebri followed, and the child died.

Mr. HULKE mentioned a case which bore on the occasional origin of cerebral symptoms from syphilitic disease of bone. A patient attended at the Royal London Ophthalmic Hospital for node of the orbit displacing the eye, and causing diplopia. From this the patient recovered under the administration of the iodide of potassium. Three months later the patient returned, suffering from epilepsy, and complaining of a fixed pain on one side of the head. Under the iodide these symptoms disappeared.

Dr. GIBB stated that he had in his possession a piece of a skull removed from a patient who died of delirium tremens.

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On the inner surface was a body the size of a bean. The patient had suffered from epilepsy nearly all her life.

Dr. Frederick Robinson gave the particulars of a case in which epilepsy followed syphilis. The case was cured by the iodide of potassium, and whilst under observation (several years) had remained well.

Dr. Dickinson exhibited a piece of intestine to which were attached

SMALL COLLOID TUMOURS.

The specimen was taken from a female patient who died in St. George's Hospital. She had great abdominal swelling, attended with fluctuation. It was supposed to be an ovarian tumour, and was tapped; but no fluid came out. There was a little jelly-like matter left in the canula. The operation was subsequently repeated at the patient's urgent request, with the same result. On opening the abdomen, the peritoneal cavity was found full of a jelly-like matter, apparently having been poured from an opening in an ovarian cyst. It had penetrated beneath the liver, and deeply in other parts wherever it had reached. There were small bodies, about the size and shape of blackberries, fixed to the intestines, some by a narrow pedicle, and others by a broader base. Under the microscope the matter showed oval granular matter, and small needle-shaped spicules.

Dr. Bristowe had once found a somewhat similar appearance. There was an infiltration of the jelly-like material in inflammatory peritoneal adhesions.

Mr. T. Holmes exhibited a specimen of

CANCER OF THE PERITONEUM.

It was taken from a patient who died of cancer of the uterus under the care of Dr. Lee. The peritoneum was studded by tubercles of cancer, appearing of a nature between encephaloid and colloid. There were masses on the liver which were easily raised from it, leaving depressions, the tissue of the liver being intact.

Mr. Hulke showed parts removed in

EXCISION OF THE KNEE-JOINT.

There was ulceration of the cartilages of an acute character, and the ends of the bones were rough and warty, but not carious. The patient was a woman, aged 29, in good general health. Two years and a-half ago, she received an injury to the joint, and then inflammation followed. Leeches were applied and the knee got nearly well, remaining only a little stiff. She subsequently became reduced in circumstances, and was badly fed. The knee then became acutely inflamed. When admitted into King's College Hospital, the limb was bent at an angle of forty-five degrees, and the parts about the joint were swollen and brawny. There was a swelling attended by a sense of fluctuation on each side of the patella, but no pus was obtained on passing a scalpel into it. After removal of the joint not the least pus was found in it. Another interesting point was that the patella was connected to the femur by fibro-cartilaginous union.

Mr. Lawson exhibited a specimen of

COMPOUND COMMINUTED FRACTURE OF THE FEMUR, EXTENDING INTO THE KNEE-JOINT.

The patient from whom the specimen was taken had fallen from a height of twenty feet. He did well for a time, but suppuration ensued, and amputation was necessitated. The two condyles were separated. There was no pus in the joint, but there was extensive ulceration of the cartilages.

Dr. Risdon Bennett exhibited a specimen, showing

LIMITED EMPYEMA

It was taken from a man who died after repeated copious hæmoptysis, and purulent expectoration. The diagnosis of the case during life was extremely obscure. The symptoms of the disease of which the patient died, commenced soon after an attack of scarlet fever. He had at first some catarrhal symptoms, cough, etc. His chest was examined by a Physician, who found nothing very marked. Repeated examinations were made, as the patient had hæmoptysis (at that time slight), and had lost a member of his family from phthisis. His chest was subsequently examined by several other Physicians, but no marked disease was detected. He next had, all at once, expectoration of an enormous quantity of purulent matter. He was then seen by Dr. Bennett, who, after careful examination, failed to detect anything, except a little ordinary coarse crepitation in the region of the spine of the left scapula. He recovered to a considerable extent, so as to be able to again attend to his occupation. He had, however, an attack of severe hæmoptysis and died. At the autopsy there was found puckering at the apices of the lungs, which were in that position solid. The left lung was firmly adherent to the thoracic parietes. In the condensation of tissues in the neighbourhood were a series of anfractuous cavities, extending into the lung, and communicating with the larger bronchi.

Dr. Gibb exhibited some

CRYSTALS OF DIABETIC SUGAR,

obtained from different samples of diabetic urine evaporated on glass slides. When the urine is very pure in sugar, and contains but little of urea and other salts, the characteristic form of diabetic crystal is obtained, namely rhomboidal prisms existing either in detached masses or in tufts; the latter may partake of true arborescence. When such is the case, with a low power under the microscope, branches running in various directions from a central stem are seen, and from these the crystals are seen to shoot in different directions. The branched form of crystallisation varies very much, but it is one of the most beautiful objects submitted to microscopic examination, and has not been before figured or described, previous to an account published by Dr. Gibb in Vol. i. of the *Archives of Medicine*. When the diabetic fluid contains a larger proportion of salts, the sugar crystallises in little circular masses, with minute crystals projecting from the surface. These masses appear to be made up of an aggregation of flat plates of sugar, and when examined on a dark ground they resemble lumps of the well-known barley-sugar.

Previous to showing the crystals, Dr. Gibb entered into a short history of the circumstances which led to their discovery, namely, the examination of the crusts of a diabetic tear and a drop of diabetic urine, to estimate the specific gravity of the former. A few days after evaporation they were found to be beautifully crystalline; this was in May, 1858.

WESTERN MEDICAL AND SURGICAL SOCIETY.

Friday, December 21, 1860.

Mr. Leggatt, Vice-President, in the Chair.

A paper, by Mr. Leggatt, was read, detailing a case of

ACUTE GLOSSITIS.

This case occurred in the severe weather of November 1858, to a gentleman aged 62, who had recently removed from London into the country, and was travelling daily to London and back, besides incurring the fatigues of a laborious profession. He had been slightly unwell for a day or two from an ordinary cold, when returning from London in the evening of the 19th of November, he fell asleep in the railway-carriage, leaving the window down. Later in the same evening he felt a slight sore throat. During the night the soreness of the throat increased and his speech became indistinct. In the morning Medical advice was obtained. At 10 a.m., the tongue was swollen, and there was a good deal of fever. Salines were given. At 4 p.m. the swelling of the tongue had greatly increased and difficulty of breathing had come on with total loss of the power of articulation and deglutition,—twelve leeches were applied to the tongue and skin below the chin, six of them taking on the tongue itself. At half-past 8 p.m. when the author first saw the patient, the tongue was protruded from the mouth and was of a deep, livid colour and about three times its natural size; it was neither tender or painful. There was considerable swelling of the sublingual glands and tissues and of the upper part of the throat. The breathing was laboured and there were occasional suffocative paroxysms from the accumulation of viscid mucus at the back part of the tongue. The pulse was 120 and tolerably full. He could not articulate and he had swallowed nothing since noon. By 10 p.m. the bowels had

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beer. moved by a castor-oil enema, and he had been able to swallow a tea cup full of beef-tea in small quantities frequently repeated. He could now make some attempt at articulation, but his countenance was sunken and anxious. His pulse was 112 and a good deal weaker. A tea spoonful of beef tea with one or two tea spoonfuls of port wine, were given every two or three hours. At 2 a.m. he was considered better in every respect, but there was considerable œdematous swelling below the jaw and tenderness of the thyroid body. The treatment was continued till towards morning when the wine was discontinued in consequence of the spasm it caused in swallowing. He continued to improve through the days and was able to renew the wine in the afternoon, also to take some liquor cinchonæ in an effervescent draught. At 8.30 p.m. the tongue had retreated within the mouth and was now coated with a thick brown fur. He could speak plainly but was very hoarse, and he had a good deal of cough. The wine and nourishment were now given more frequently, and an enema of beef-tea and laudanum, with ten grains of quinine and a tablespoonful of port wine was administered every six hours. The patient continued to improve, and by Monday, November 22, was able to make a good fish dinner. Mr. Leggatt remarked that the local depletion, more particularly the direct application of the leeches to the tongue, appeared to have had the happiest effect, and with the opportune exhibition of nourishment and stimulants the progress of the disease had been checked. The author alluded to several cases of acute glossitis related in various well-known works, and in the pages of the Medical journals, in which either local depletion or incisions had been followed with very beneficial results. At the same time, he remarked, there were evidently two forms of the disease—one more circumscribed in extent and tending to suppuration, the other diffuse and leading to extensive serous infiltration of the affected tissues, and running rapidly into a condition attended with imminent danger to life. In the latter class of cases, the author more particularly recommended the treatment above alluded to, together with the prompt exhibition of nourishment and stimulants, a point not always dwelt upon in the published cases of the disease in a manner which its importance required.

FRIDAY, JANUARY 18, 1861.

The PRESIDENT in the Chair.

Mr. PRESCOTT HEWETT, F.R.C.S.E., narrated

A CASE OF PURULENT INFECTION, IN CONNECTION WITH DISCHARGE FROM THE EAR, WITH REMARKS.

The particulars of the case were as follows:—The patient, a young lady, aged 18, had discharge from the ear as a sequence of measles; and about four weeks after its occurrence she was seized with severe rigors, which were followed with much fever, a furred tongue, and symptoms of typhoid fever, with suppression of the discharge. The rigors continued, and when seen by the author the skin had assumed an earthen hue, and the fever was intense. There was no pain in the head, and the intellect was clear; but there was pain extending down the side of the neck, above the course of the jugular vein, and the head inclined to that side, and there was swelling at its base. The diagnosis was formed that phlebitis was present, and in eight days matter occurred in one of the sterno-clavicular articulations; in the course of a few days the knee became involved, and symptoms of pneumonia present. No suppuration occurred in the knee—the puffiness and effusion subsided (as did the lung symptoms)—which remained stiff, although it finally recovered. In about seventeen or eighteen days from the commencement of the phlebitis, swelling and pain occurred over one of the hip-joints; a deep abscess formed, which was opened early, and the joint escaped being involved. The patient finally recovered under the treatment by wine and morphia. The author was led to the diagnosis from the course and character of the pain, which had occurred in connexion with cases of fracture of the skull with similar results, and the same has been observed in some cases narrated by Dr. Gull in the *Medico-Chirurgical Transactions*. He then remarked on the three possible sources of the infection, stating that the matter may have formed in the mastoid cells, and thence spread to the lateral sinuses, or else it may have originated in the tympanum, and then extended to the jugular vein, or more probably there may have been phlebitis of the minute veins leading to the lateral sinus, which latter origin of the disease afforded a more favourable prognosis than either of the other two. If the mastoid cells were affected, there was generally caries of the bone, and if so, the issue to be expected must be very unfavourable. With respect to the prognosis, the author stated that eight out of ten such cases generally terminated in death, from deposits (secondary) taking place in important internal organs, but that when such deposits were confined to the surface and external parts, a favourable prognosis might be given. All these views were illustrated by appropriate cases.

HARVEIAN SOCIETY OF LONDON.

THE sixth meeting of the present Session took place on the 17th instant, the newly-elected President, Dr. Sieveking, occupying the chair. After the ordinary business of the Society had been disposed of,

A paper, by Dr. LEVISON, was read on the

ETHNOLOGY OF THE MALAYS OF THE CAPE.

His object was to direct attention to the fact which he stated, of the great resemblance, both in colour, physical peculiarities, and language, which still existed between them and their parent stock,—a resemblance which holds good even in the diseases to which they are most peculiarly liable. He considered this due to their having retained in a foreign land their national costume and religion, and the practice of strict intermarriage; and the conclusion he drew was, that the physical changes in a nation were more dependent upon mental influences, than traceable to the effect of climate. If ever these Malays were converted, he should expect them to change greatly both in colour and stature.

In the discussion which followed, Dr. Drysdale, Dr. Browning, Dr. Greenhow, Mr. Sedgwick, and the President took part, the latter remarking upon the dissimilarity of the author's views to those put forth by Mr. Buckle. From personal observation, Mr. Sedgwick considered that the Malays of the Cape had degenerated both in language and physique.

Mr. JAMES R. LANE related the particulars of a case in which, under the sanction of three Physicians, he had thrice ineffectually attempted the operation of Paracentesis Thoracis in a boy 9 years of age, for supposed empyema. The diagnosis was rendered more difficult from fluid having upon one occasion followed the introduction of the trochar. After death one side of the chest was found filled with a mass of malignant disease, hard in the centre, but externally soft, having cysts connected with this latter portion: it was from one of these cysts the fluid had escaped.

Dr. STEWART mentioned a case which had recently occurred in his own practice, of violent flooding following abortion at the third month, which he supposed to be dependent upon a small polypus to be detected protruding from the os uteri. In the progress of the case, some most offensive flocculent matter was passed; and upon a future examination no polypus could be detected, which he therefore considered to have sloughed away.

After a few remarks from Mr. Browning, Dr. F. Cock, and other members, the Society adjourned until February 7, at which meeting the President announced that Dr. Pollock would read a paper on "What we know of Phthisis regarding its Cure."

THE QUAKER'S DISEASE.—"Did you ever hear," writes Lord Jeffrey to Lord Murray, "that most of the Quakers die of stupidity, actually and literally? I was assured of the fact by a very intelligent Physician who practised among them for twenty years, and informs me that few of the richer sort live to be fifty, but die of a sort of atrophy, their cold blood just stagnating by degrees among their flabby fat. They eat too much, take little exercise, and, above all, have no nervous excitement. The affection is known about Liverpool as the 'Quaker's Disease.'"—*Life of Lord Jeffrey*.

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OBITUARY.

THE LATE DR. ARTHUR S. THOMSON.

THE last mail from China brought the melancholy intelligence of the death of this officer on the 4th of November, at the Head Quarters of the Army at Pekin.

Dr. Arthur Saunders Thomson, was a native of Scotland, and received his Professional Education at Edinburgh, where he graduated in 1837 the gold medal given by the Medical Faculty being awarded to his thesis "On the Influence of Climate on the Health, and Mortality of the Inhabitants of the Different Regions of the Globe." He shortly afterwards contributed to the *Edinburgh Medical and Surgical Journal*, a valuable paper, entitled "A Statistical Inquiry on Fever." In October, 1838, he entered the Army as an Assistant-Surgeon on the Staff, and in the following January was appointed to the 17th Regiment. He immediately proceeded to Bombay, to join the Service Companies, and continued to do duty with them till 1842, when he was transferred to the 14th Light Dragoons serving in the same Presidency. During this period, he did not allow the enervating influence of the climate to check his zeal in the pursuit of Professional knowledge, but contributed several valuable papers to the Indian Medical Journals. Of these, we may particularise his discussion of the important and interesting question "Could the Nations of a Temperate Climate Colonise and Increase in a Tropical Country, and *vice-versa*?"—a subject probably suggested by his previous studies on the geographical distribution of diseases. Another interesting contribution of practical value, was a "History of the Epidemic Fever" which prevailed among the men of H.M. 17th Regiment during the monsoon of 1841, when quartered in the Colabah Barracks, Bombay,—in which the advantage of a cruise at sea to the men recovering from fever was clearly demonstrated. In 1847 Dr. Thomson returned to England on leave of absence, and while at home was promoted to the Surgeoncy of the 58th Regiment, in the Medical charge of which he proceeded to New Zealand at the end of the same year. The duties of a Regimental Surgeon in so healthy a climate naturally left him a considerable amount of leisure, and this he turned to account in collectiag information respecting the inhabitants, and the natural productions of the colony. In 1851 he sent to the Statistical Society of London, "A Statistical Account of Auckland, New Zealand," as it was observed during the year 1848, and in 1854, "A Contribution to the Natural History of the New Zealand Race of Men," being observations on their stature, weight, size of chest, and physical strength; and in 1854 a valuable paper from his pen on "The Customs and Diseases of the New Zealanders," appeared in the *British and Foreign Medico-Chirurgical Review*. He also published, in the *Edinburgh New Philosophical Journal*, an account of "The Discovery of a Frog in New Zealand," and a very interesting description of two caves in the North Island in which bones of the dinornis were found, with some general observations on wingless birds. In the beginning of 1859, Dr. Thomson returned with the 58th Regiment to England, and shortly afterwards published his "Story of New Zealand Past and Present," which is the best and most interesting history of that colony with which we are acquainted, and was so well received by the public that it has already gone through two editions. In November, 1859, Dr. Thomson exchanged to the staff, with a view to being employed in active service, and proceed to China in the beginning of last year in charge of the Hospital steam-ship *Mauritius*. When the Army took the field he was placed in Medical charge of the Division under the command of Sir R. Napier. At the attack on the Taku Forts the duty of making the arrangements for the wounded in the front devolved upon him, and the manner in which he discharged it met with the commendation both of the General and of the Principal Medical Officer. He accompanied the army to Pekin, and, after the capture of the city, was selected to remain as Medical Officer in charge of the force destined to winter at Tien-tsin. He had been ailing slightly for some time, but continued to discharge his duties till November 2, when he was attacked with severe rigors, followed by abdominal pain and swelling, attended with great prostration. He never rallied, but died on the 4th, and was interred in the Russian burial-ground at Pekin, deeply regretted both by the officers and men, by whom he was deservedly loved and respected. The cause of death was diagnosed to be the rupture of an abscess of the liver into the abdominal cavity.

Of Dr. Thomson's character we need only say, that, warm-hearted, honest, and unaffected, he made no enemies, and was most highly esteemed by those who knew him most intimately. The preceding very imperfect sketch sufficiently testifies to his zeal and industry in the pursuit of science. We should feel, however, that we had left an important duty unperformed did we fail to point him out as an example to young Army Medical Officers. Although he served during a period when that Department was at a very low ebb, when the Medical Officer was too often looked upon as an evil to be tolerated, and when no official encouragement was given to those who worked zealously to increase their Professional knowledge, he steadily persevered in the course which as a student he had so honourably begun, and lost no opportunity of contributing his share to the advancement of science. The position of the Medical Officers has of late been greatly improved, and every inducement is now held out to them to distinguish themselves by their professional and scientific acquirements. Let them show themselves deserving of these advantages, and, taking the subject of this memoir as their example, let them work steadily, patiently, and unremittingly in the investigation of some of those questions bearing upon the science of Medicine for which, in the course of their service, they will have so many opportunities. In those positions in which they are frequently placed, where their Professional duties leave them abundant leisure, let them not waste it in listlessness or amusement, but, like Dr. Thomson, select some subject of inquiry, and occupy their leisure by collecting information upon it, in the hope of contributing their share to the advancement of knowledge, assured that, even should they fail to gain an official acknowledgment of their labours, they will derive much enjoyment from the occupation, and have the satisfaction of feeling that they have, to the best of their ability, endeavoured to promote the welfare of their fellow-men, as well as to raise the scientific character of their Profession.

LEGAL INTELLIGENCE.

A FALSE ALARM OF DEATH.

RECENTLY our pages contained an example of a death-bed will held good by the Court of Probate. Contrasted with that decision an instance merits mention where a deed made in anticipation of immediate death was cancelled, in consequence of the party having recovered after its execution. A patient often seems anxious to learn the probable result of his complaint, and in order that he may know whether the final hour of departure has come, asks his Medical adviser's opinion, who frequently yield to such importunities without due consideration, and chiefly from a desire not to appear unkind or unfeeling. In some cases this proceeding may be right and proper, but in others it is quite the reverse, as will be aptly illustrated from a case which has recently engaged the attention of the Master of the Rolls, and apparently had its origin in the Medical attendants of the patient too easily giving their opinions respecting the probable result of the disease under which their patient then laboured. In the month of August, 1859, Mr. Philip Forshaw, of Ormskirk, brewer, was in such a precarious state of health as to lead his Physicians to suppose that there was little chance of his living beyond a few days, and to their feeling it a duty to communicate this supposed contingency to their patient, and which they did accordingly. Upon that information Mr. Forshaw thought it prudent to settle his property upon such members of his family as he wished to endow. Accordingly on September 1, 1859, he executed one deed whereby he settled the sum of £8000 upon his two daughters, and on the next day he made his will, confirming the deed he had thus executed. On September 5, Mr. Forshaw sent for Mr. Welsby, his solicitor, and instructed him to make a new deed, under which he not only gave the £8000 previously settled

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to his daughters, but also parted with the whole of his property to his family; this last deed being completed on September 16, 1859. Mr. Forshaw, however, recovered contrary to the expectation of his family, and the attending Physicians. Finding that the deed executed on September 16, 1859, if allowed to stand, would deprive him of the whole control over his property, and also leave him, to a great extent, dependent upon his children for support, he determined to have this deed revoked, but was met by the assertion that the deed was binding, more especially as one of his daughters had married subsequently to its execution, and that the settlement therein made upon her was a valid consideration, upon which her husband had been induced to marry. In consequence of this state of things, Mr. Forshaw filed a bill in Chancery, praying that the deed might be cancelled. In giving judgment the Master of the Rolls said, that the plaintiff evidently executed the deed of September 16, 1859, under the impression that he was about to die, and immediate death was the proximate cause of his parting with the sole control of the property, in the way he had done. The supposition of his Physicians and the fears of his family as to impending death were happily unfounded, and the plea of *causa mortis* became invalidated. The deed was executed under a particular impression, and to meet an immediate emergency. The impression proved to be erroneous, and the emergency was satisfied by a precaution, which however praiseworthy, could not be construed as against the plaintiff's interest. As to the allegation of the last deed being a consideration, upon which one of the defendants had married the plaintiff's daughter, it was evident that such defendant had based his considerations of marriage irrespective of any such deed. The deed must be set aside and cancelled, but without costs. It was argued that it would be unfair to let the plaintiff's solicitor, who was made a party to this suit, have any costs; but the Court thought otherwise. Without imputing any improper motive to this gentleman, the Court conceived he ought to have obviated the necessity for such a suit as this, by putting into the deed the ordinary power of revocation, which he had not done. The order to be made would, therefore, be for the cancellation of the deed of September 16, 1859, and its delivery up to the plaintiff. There would be no costs given to any of the parties.

THE PROPOSED SCOTCH DEGREES IN MEDICINE AND SURGERY.

A Committee of the Privy Council were engaged last week, during three entire days, in hearing the arguments of counsel with reference to certain Ordinances issued on August 6, 1859, and March 19, 1860, by the Scottish University Commissioners, as to Degrees in Medicine and Surgery in the University of Edinburgh. These Commissioners were appointed by the Act 21 and 22 Victoria, cap. lxxxiii., which conferred on them a power to make rules and ordinances as to the course of study, manner of teaching, and examinations in the Universities, as also the granting Degrees in Arts, Divinity, Law, or Medicine. When the new Ordinances were first issued, the Royal College of Surgeons of London and three Scotch Medical Colleges petitioned the Privy Council against them, and thereupon the Ordinances were returned to the Commissioners, who, after hearing the petitioners' statements and the Senatus Academicus, decided to adhere to the Ordinances as issued. Against that decision the same petitioners again appealed to the Privy Council. The Ordinances in question established the Degrees of Bachelor of Medicine (M.B.) and Master in Surgery (C.M.) in the University of Edinburgh, besides making arrangements for examination, etc. in connexion therewith. But it was now objected that the Degree of C.M. (Master in Surgery) was absolutely void, and *ultra vires* of the University; that the Degree was unnecessary, as also inexpedient; and that, even supposing it legal or desirable, the examinations provided and qualifications required were insufficient. The Commissioners justified the creation of the new Degree (C.M.) on the ground of the University's "inherent powers;" that it was competent by the University Charters; that the custom had been to create new Degrees in Universities, both in this country and abroad; that Surgery was included in the Faculty of Medicine; and further, it was not necessary that Degrees should be given each in a distinct Faculty. In opposition the petitioners contended that there existed no foundation for the claim of "inherent power;" that the practice of the University did not sustain this claim; that the Degrees of M.A., B.A., M.D., D.L., B.L., and D.D., granted in the University, were sanctioned by the old Charter, while the new designation of C.M. was not a known Degree in Medicine; that Surgery formed a distinct Faculty; and it was incompetent for the University to grant any such Degree. Moreover, the Universities of Oxford and Cambridge had never introduced any new Medical Degree; that to do so required the express sanction of Parliament; and that the attempts of the Glasgow University to grant Surgical Licences were defeated by the unanimous decision of the House of Lords. Finally, the system established by the Medical Act of 1858 was a compromise between the various Medical and Surgical bodies, which would be completely overturned by these proposed measures, which were never taken into consideration at the time of that compromise. Against these arguments counsel answered, on behalf of the University, that nothing more had been done by the Ordinances than to adapt the new system of Degrees to the advances which Medical knowledge and science had lately made; that the modern meaning of the term Medicine comprised Surgery; and that the University being empowered to give, and really giving, ample and efficient instruction in Medicine, including Surgery, it was entitled to confer degrees in Surgery; that there must be power to modify existing Faculties, and if necessary to create a new Degree; that any Faculty permitted to another University, it was competent for the University of Edinburgh to establish; that at Glasgow Surgical Degrees had been granted during the last forty years, entitling the holders thereof to register, as also to practise; and, therefore, the Ordinances were not illegal or invalid. With regard to the inexpediency and injurious tendency of the new ordinances it was urged for the four Colleges that both the public and Profession were well satisfied with the way in which the London College of Surgeons had hitherto discharged its duties: that the Commissioners appointed in 1830 pronounced decidedly against establishing a new Surgical Degree; and that the present Commissioners had owned they were led to a different view, simply on account of the effect of the recent Medical Act. But it was insisted by the Colleges that those holding Medical Degrees were now put in a better position; that before 1858 the Medical Degree did not give a right to practise Surgery within the old limits of the charters of the Scottish Surgical Colleges; and that, in fact, wherever a Surgical Licence became requisite, a Medical Degree was not received as a substitute, while all that the Medical Act did was merely to prevent any one from passing himself off for what he was not; that the new Degree was established, not because it constituted a good thing of itself, but in order to obviate doubts respecting the effect of the recent Medical Act; that the Commissioners had no right to undertake its interpretation; that, if the doubts were well-founded, they would injure certain persons; if ill-founded then they were themselves creating doubt and confusion. Counsel likewise urged that neither test nor qualification was required for obtaining the new Degree of M.C. distinct from M.B., and therefore it seemed a mere fiction—a pretext—for enabling parties with the latter title to add Surgery to their practice, without any additional qualification. Further, the preliminary examinations were fixed too low, even much lower than at any other institution granting Medical Degrees; while far too short a time was prescribed for attendance on Professional studies, and that the Edinburgh University, on the principle of a Dutch auction, seemed to be trying who could bid lowest. To these arguments it was answered, on the part of the University, that the Edinburgh School of Medicine never would have attained its present eminence, if the degree of M.D. it granted had not conferred the right to practise as a General Practitioner; while, according to the construction put upon the Medical Act, and fostered by the petitioners, such right was called in question, it hence became necessary, for the interests both of the University and Profession, to establish the new Degree. Counsel also argued that the Board of Examiners was not fairly or properly constituted, and that the regulations

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restricting attendance upon the non-academical lectures proved extremely injurious to the Professional and public interests involved.

At the conclusion of this elaborate argument, the Lord-Chancellor having thanked counsel for the information they had furnished, stated that the Committee would report to Her Majesty the result of their deliberations.

CHARGE OF RECEIVING A LUNATIC WITHOUT A LICENCE.

At the Bow-street Police-court, last week, Mr. Welsby, the Barrister, on the part of the Commissioners of Lunacy, appeared to prosecute a charge against Dr. Herbert E. C. Kelly, of Pinner, for receiving into his house a lunatic to board and lodge, for profit, the house not being licensed for that purpose, and there being no certificate of two Medical men as to the lunacy of the patient.

Mr. Best appeared for the defence.

Mr. Welsby, in opening the case, recited the 8th and 9th Vict., for the regulation of the care and treatment of lunatics, especially caps. 45 and 90, which required compliance with the conditions, as stated in the summons. Dr. Kelly had received as a patient, boarding and lodging in his house, a gentleman named Brackett, who was undoubtedly insane. He believed he should be able to show that there was no licence or certificate, and notice had been served on Dr. Kelly to produce these documents, if they existed. The Commissioners had felt it their duty to prosecute for such a breach of the regulations, and he would ask his worship, if he considered the case established, to send it for further investigation elsewhere.

Mr. William Goodman deposed that his wife was the cousin of Mr. Edward Brackett, a lunatic, who had been attended by Dr. Carr, and by direction of that gentleman he had been sent into the country to reside at a cottage. After he had been there some time, Dr. Kelly attended him, and he thought him so harmless that it was not necessary to have a man with him. He had some delusions. About October he was removed to Dr. Kelly's house, with his female attendant. He had never been out of custody. His friends were to pay three guineas a-week, and he was to stay about three months.

Witness did not think that he had paralysis. He walked without assistance, but would take any one's arm in a social way.

Mr. William Carr, F.R.C.S, deposed that he had known Mr. Brackett for several years, and was called in to attend him in July of last year. He was in a state of great enervation as if from *delirium tremens*. Witness attended him up to September, when he became subject to delusions, to the effect that he was married to the Queen, and was possessed of immense wealth, etc. He elevated witness to the peerage, and called him "Lord Carr." Witness attributed his derangement to an over-wrought mind. There was no paralysis. After a time he became less excitable, and witness recommended his removal to the country.

Cross-examined: He was not a confirmed lunatic.

Mr. John Thomas Arlidge, M.B. and M.R.C.P., deposed that in consequence of an order he had received from the Lord Chancellor he went to Pinner to visit Dr. Kelly's house, and report on the case of Edward Brackett. Dr. Kelly said he did not understand why witness should be sent on such an errand as he had had previous patients, and such a requirement was never made before. He said he was paid three guineas a-week, and had taken the patient at the particular request of his friends. Mr. Brackett was out for a walk. On his return witness examined him in the presence of Dr. Kelly. He said that he had several million of horses, for one of them he would not take 80,000*l*., and that he had been Governor and Admiral of Bombay, and Commander-in-chief of all the World. Witness observed to Dr. Kelly that there could be no question as to the patient being a lunatic, and Dr. Kelly said there was no doubt of that. Witness said he was there unlawfully, and Dr. Kelly replied that he was not aware of it.

Mr. Thomas Martin: I am chief clerk in the office of the Commissioners of Lunacy, in Whitehall-place. Licences for houses licensed to receive lunatics, and also the reports and returns, pass through my hands. From my knowledge of the business of the office, I am enabled to state that no licence has been granted to Dr. Kelly in respect to his house at Pinner, and that no report or certificate has been received from him in respect of Mr. Brackett.

Mr. Best contended that there was no evidence to show that the patient was in a state of lunacy at the time he was received, or that he was received as a lunatic. If Dr. Kelly had committed any error, it was from ignorance of the law.

Mr. Henry said the charge was simply one of breach of regulation, of which a *primâ facie* case had been made out. He had nothing to do with the question of the ignorance of the law.

Mr. Henry committed the defendant for trial, but admitted him to bail in two sureties of £50 each.

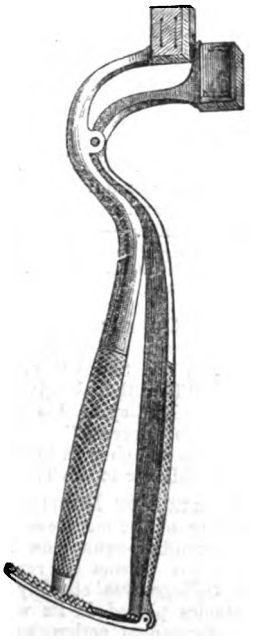
Bail was immediately provided.

NEW INSTRUMENT.

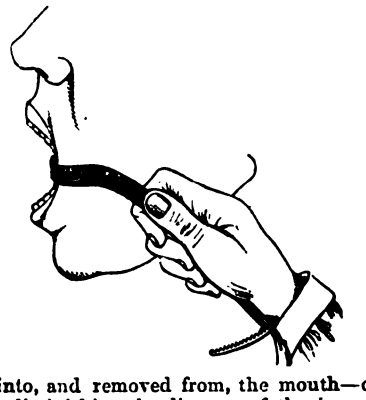
AN INSTRUMENT FOR KEEPING THE MOUTH OPEN IN OPERATIONS UNDER CHLOROFORM.

By Alfred Coleman, M.R.C.S., &c.
Dental Surgeon to the Metropolitan Free Hospital.

This instrument is constructed upon the principle of a pair of forceps, with this difference, however, that the handles do not cross each other at the hinge, so that, by pressing them together, the blades or short extremities are separated Abou the hinge the instrument is curved upon itself. Attached to one of the handles is a spring-catch, which keeps the blades fixed at any required distance from each other. The extremities of the blades are made broad, and covered on their outer surface with vulcanised india-rubber. In using the instrument the handles are opened and the blades brought together, and the latter are introduced between the teeth at the back of the mouth, at the opposite side to that on which any operation is to be performed. The curve of the instrument adapts itself to the cheek and prevents either the handles or blades being in the operator's way. By compressing the handles the blades, and, consequently, the patient's jaws, are separated from each other, and, by means of the catch, can be maintained in the required position at the will of the operator.



The instrument was constructed and is best adapted for operations on the teeth under chloroform, but it has been found useful in other operations on the mouth as well. It possesses the following advantages:—Of being readily



introduced into, and removed from, the mouth—of quickly increasing or diminishing the distance of the jaws from each

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other—of enabling the assistant who administers the chloroform to apply this agent from time to time without removing the instrument from the mouth—of being quite out of the way of the operator—and, by means of the vulcanised india-rubber pads, of avoiding all risk of injury to the teeth or gums.

The instrument is constructed by Messrs. Ferguson and Sons, of Giltspur-street.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS.—At the Comitia Majora Extraordinaria, held on Thursday, the 17th inst., the under-mentioned gentleman, having undergone the necessary examination in December last, was admitted a Member of the College. (This gentleman's admission had been deferred to this date in consequence of indisposition.)

Name.	Degree.	Residence.
Smith, W. A.	M.D.	Doughty-street, W.C.

The following gentlemen, previously extra-Licentiates, were also admitted Members, under the Bye-Law applicable to extra-Licentiates of the College:—

Name.	Degree.	Residence.
Keese, James	M.B.	Madras.
Muller, Charles.		Sydney, N. S. Wales.
Rooke, B. P.	M.D.	Bombay.

At the same Comitia, the following gentlemen were also admitted Members, having been previously elected under the temporary Bye-Law (now expired) relating to Graduates in Medicine:—

Name.	Degree.	Residence.
Yeo, Gerald	M.D.	H.M.S. "Ganges."
Harris, W. P.	M.D.	Lucknow.

APOTHECARIES' HALL.—The under-mentioned gentlemen passed their examination in the Science and Practice of Medicine, and received Certificates to Practise on Thursday the 17th inst.:—

Cooper, George Frederic, Reading
Morrish, Thomas Fox, Ledbury, Hereford.

THE QUEEN'S HOSPITAL, BIRMINGHAM.—The munificent donation of £1000 has been presented by Joseph Guest, Esq., by Mr. Sands Cox, in aid of the Hospital, on the condition "That there be given to the Incumbent of St. Edmund's Church, Dudley, in his name, six in-patient tickets for ever after his decease." Congregational collections at the churches and chapels to the amount of £3433 6s. 4d. have been paid over to the Treasurer of the Charity.

COLLEGE OF DENTISTS OF ENGLAND.—The fifth annual meeting of the members of the College of Dentists was held in Cavendish-square on Tuesday last, the attendance being numerous. From the report of the Council it appeared that the College was steadily progressing, notwithstanding the obstacles placed in its way. The "declaration" in favour of independent action, as represented by the College, had been signed affirmatively by the extraordinary number of 3000 Medical Practitioners in England and Wales alone. The expenses had been heavy, but a considerable balance remained in the hands of the Treasurer. The College premises had been secured on lease for a term of years. The President, Mr. Waite, in moving the adoption of the report, warmly congratulated the members on the satisfactory position of the Institution, and stated that it was the firm determination of the Council to persevere in the policy which had conduced to so gratifying a state of affairs. The motion was seconded by Mr. Hayman, of Bristol, and unanimously agreed to. The Treasurer, Mr. Robinson, then read his statement, which was also unanimously received, as was that of Dr. Purland, the Librarian. The Officers and Council for the year ensuing having been elected, and votes of thanks passed to the executive for their past exertions, the meeting adjourned.

PROPOSED NEW PARIS LUNATIC ASYLUMS.—The utter want of accommodation for lunatics in Paris, 1700 of them having to be sent annually into the provinces for treatment, has indueed the Prefect of the Seine to appoint a commission for the purpose of investigating the best means of providing for them. At present, it is proposed to erect, in the Department of the Seine, seven Asylums, each capable of containing 500 patients. The lunatics who are now sent into the country will be first provided for in these, and then a portion of the patients who now over-crowd the wards of Bicêtre and Salpètrière will be removed to these. Each asylum will be managed by a well-paid Medical Director, who will be obliged to reside and be unconnected with any private asylum. His staff will consist of an Assistant-Physician, a *pharmacien*, and two *internes*. One question, it is said, excites much discussion in the Commission, viz.—Whether it will be better to attach to each Asylum a department of paying-patients, as is done at various provincial Asylums, as Quatre-Mares, Auxerre, Blois, and Toulouse,—the money thus received powerfully adding to the prosperity of the establishments and the comforts of the indigent; or is it preferable to establish six Asylums for the indigent and one for the well-to-do class? this latter much resembling the Imperial Asylum of Charenton.

VITAL STATISTICS OF LONDON.

Week ending Saturday, January 19, 1861.

BIRTHS.

Births of Boys, 939½ Girls, 920; Total, 1859.
Average of 10 corresponding weeks, 1851–60, 1692·3.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	924	1002	1926
Average of the ten years 1851–60	609·2	610·2	1219·4
Average corrected to increased population..	..	..	1351
Deaths of people above 90	..	2	2
Deaths in 15 General Hospitals	50	32	82

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1851.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	376,427	..	7	3	2	9	2	..
North ..	490,396	1	8	8	2	21	6	1
Central ..	393,256	..	10	6	1	8	3	1
East	485,522	1	10	8	5	16	7	2
South ..	616,685	1	5	2	1	29	8	5
Total.. ..	2,362,236	3	40	27	11	83	26	9

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29 936 in.
Mean temperature	30·5
Highest point of thermometer	43·9
Lowest point of thermometer	21·4
Mean dew-point temperature	26·2
General direction of wind	N.E.
Whole amount of rain in the week	0·11 in.

TO CORRESPONDENTS.

Dr. Wallace's (Greenock) paper has been received.

Mr. Raymond's Letter shall be inserted.

Mr. Todd's case of Bayonet Wound shall appear.

Dr. Wardell, Dr. Brown, and others who kindly send us notices of births and marriages will see that we do not insert such notices. It is in contemplation to devote a certain space in the advertising columns to these announcements.

Alpha would be obliged to pass the Preliminary Examination; but having commenced his studies he could do so at any time before the Professional Examination for the Licence.

Dr. F. Adams's learned paper on the Roman Bath shall appear next week, if possible.

PROVIDENT SOCIETIES.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Mr. Hazard will find what he requires in the Norwich Provident Society, "established for affording to the middle classes facilities for insuring.

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against sickness." If he inquire of the Secretary, C. R. Gilman, Esq., Norwich Provident Society, Head Office, St. Giles-street, Norwich, he will give him all the needful information. I am, &c.

Ilford, January 21. G. W. WILLIAMS, M.D.

A PROVERB.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In Mr. Jeffreson's "Book about Doctors" occurs a passage which states that it is an Egyptian proverb that "the stick descended from Heaven." Can you inform me where this proverb occurs, and whence it sprung? I am, &c.

York, January 23. FRED. NEEDHAM.

GENERAL PHYSICIANS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Now that the College of Physicians have resolved to admit the General Practitioners, perhaps opinions from us may not be unacceptable. Some of us, both in your own and other periodicals, have stated theirs; but I have seen none without dissatisfaction much outweighing satisfaction.

I with the rest, am glad the College of Physicians have opened their doors to us, and there the gratification ends; they give us a place, but no name more than we have now; therefore, they do not alter one jot, in the eyes of the world the position of the doubly-qualified Practitioner.

The fee also is much too high for us who have already paid for our Surgical and Medical Diplomas.

The advantage is, I think, quite on the side of the College of Physicians, and for my own part, I would sooner add a few pounds to the fee they now ask, and go to St. Andrews and get something for my money, than give the College of Physicians fifteen guineas and get nothing. The remedies are too apparent to need stating. I am, &c.

Sussex, January 23. A GENERAL PRACTITIONER.

TESTIMONIALS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I have just observed in the advertisement columns of a weekly paper the following paragraph:—

"Dr. Hassall reports:—'I have carefully examined, and also tested, the magnetical properties of the Patent Magnetic Hair and Flesh Brushes of Mr. F. M. Herring, and I have to state as the result of this examination, that I regard them as the most perfect brushes hitherto constructed, both as respects their mechanical construction and their magnetical action.' They are the remedy for gray hair, neuralgia, rheumatism, etc."

If Medical men allow their names to appear, voluntarily or involuntarily, in the advertisement columns of non-Professional newspapers, it is the duty of the Profession to put a stop to proceedings which stain the character of the Profession, and which ought to require merely an expression of disapproval from its insulted members to remove and prevent.

January 21. I am, &c. REVALENTA.

DRUGGISTS' ADVICE.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—The following advertisement often appears in the *Times*:—

"Invalids wishing to Consult a Physicion or Surgeon, can have the benefit of thirty years' experience, gratuitously, as to whom they should consult in any case, by applying personally to Mr. Stevens, Proprietor of the City Dispensing Establishment, 112, Cheapside, opposite Bow Church. Established 1616."

As your readers may like to know who are the gentlemen to whom patients are sent by Mr. Stevens, I may tell you that a former patient of mine with imperfect vision, was referred to Mr. Macmurdo, 7, New Broad-street. An acquaintance wrote to ask who should be consulted in a case of suspected consumption. I send the reply. On the card are the names of Dr. Williams, 49, Upper Brook-street, and Dr. Jeaffreson, 2, Finsbury-square. Mr. Stevens says in his letter:—"Dr. Williams is the highest authority in London in consumption, and if you will present my card to him, I am sure he will give the case his best attention." A third enquiry as to a case of "tumour" led to a reference to Dr. P. Smith, 25, Park-street, or Dr. Bennett, 60, Grosvenor-street. I enclose Mr. Stevens's cards for your inormation. I am, &c.

January 22. A SURGEON.

CERTIFICATES OF LUNACY.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—The recent prosecution at Bow-street, of a Registered Medical Practitioner for having received an alleged lunatic into his house, without the customary Medical certificates, induces me to ask who are now legally considered the proper parties to sign such documents? The Act of Parliament requires the certificate of two Physicians, Surgeons, or Apothecaries; and it declares that any Physician, Surgeon, or Apothecary who shall knowingly sign a certificate which untruly states particulars required by the Act, becomes guilty of misdemeanour. Now, one of the essentials is that the certifier should be duly authorised to practise in either of the above-named capacities; and indubitably this must have reference to the place where the missive is granted. Before the Medical Act of 1858, there existed no doubt regarding Practitioners who held the requisite qualification for signing these lunacy certificates in England: such, however, cannot be predicated with equal certainty since that enactment came into operation. For although the above Act declares that every Registered Practitioner shall be entitled, according to his qualification or qualifications, to practise Medicine and Surgery, as the case may be, in any part of her Majesty's dominions, it certainly does not repeal a single existing statute relating to the practice of Physicians and Apothecaries in England or Wales. Indeed, it requires, as an additional qualification to those formerly obligatory, that the Practitioner is registered. The construction which the Medical Act has received by various decisions in courts of law at Westminster has been rendered very narrow; and the same limited interpretation of the words "according to his qualification or qualifications," would so operate as to leave the parties authorised to sign lunacy certificates in England exactly the same as they were prior to the Medical Act. The object of that legislative measure was simply to enable individuals requiring Medical aid to distinguish qualified from unqualified Practitioners. Consequently, unless the phrase quoted can be considered to repeal former prohibitions in reference to the practice of Physicians and Apothecaries, it appears too doubtful for any one in England or Wales holding a qualification not deemed sufficient before 1858, to give the usual Medical certificate demanded in cases of insanity. On that point there ought to be no uncertainty, as any infringement of the Lunacy Act may expose parties to prosecution, while ignorance of law will afford no defence. But the Medical Act has already been shorn of so many of its previously assumed attributes, that I shall not be much surprised, should some new decision at Westminster Hall even still further curtail or nullify the beneficial results which over-sanguine reformers at one time anticipated would flow when it came into operation. Perhaps you will kindly enlighten the Profession on this matter.

I am, &c.

January 21. QUERIST.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Please to refer to the *Standard's* report of a prosecution under the Lunacy Laws, under date of Saturday, January 19, 1861. The case is of the utmost importance. If the law as expounded by the Commissioners of Lunacy is correct, a parent cannot retain a lunatic child in his own house without a licence; a lodging-house or hotel-keeper cannot board and lodge a lunatic without a licence or Medical certificate, nor could I take into my house as an inmate the dearest friend I have, if he happened to be under a mental cloud, without my domicile being licensed as a Lunatic Asylum. This proposition is so monstrous that I cannot believe it to be law.

Let me put the case in another way: My son, daughter, brother, wife, or friend is mentally afflicted. I do not wish the fact to be generally known or to shut them up in an Asylum; but I think change of air and scene is advisable, and I send them to lodgings at the sea-side or elsewhere,—if to a doctor so much the better—cannot I do this without making the unfortunate lodging-house or hotel-keeper liable to an action at law? It seems not. If the law be thus, the sooner it is known the better.

I am, &c.

Liverpool, January 21. A PHYSICIAN.

COMMUNICATIONS have been received from:—

M. CLAUDE BERNARD; DR. WEST: DR. BALFOUR; DR. WOOD, DR. BROWN MR. COOPER TODD; M. WAUVENS, Brussels; DR. KIDD; MR. LAURENCE MR. SOLOMON; DR. HILDIGE; DR. WARDELL; MR. RAYMOND; MR. ADHEAD; MR. MARSTEN; MR. NEEDHAM; MR. SLATER; MR. RYMER; M HOCKLEY; DR. DEVENISH; MR. BROWN; DR. BAINES; MR. HAMILTON MR. VINCENT; MR. PORTER; and MR. WALDEGRAVE.

APPOINTMENTS FOR THE WEEK.

January 26. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-Cross, 1 p.m.

ROYAL INSTITUTION, 3 p.m. Dr. E. Frankland. "On Inorganic Chemistry."

28. *Monday*.

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

MEDICAL SOCIETY OF LONDON, 8½ p.m. Dr. Thudichum "On the Physiological and Therapeutic Effects of the Turkish Bath."

29. *Tuesday*.

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Professor Owen "On Fishes."

30. *Wednesday*.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m. Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

HUNTERIAN SOCIETY, 8 p.m. Special Council Meeting, 7 p.m. The President "On the Results of some Trials of the Treatment of Phthisis by the Hypophosphites."

31. *Thursday*.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Professor Tyndall "On Electricity."

February 1. *Friday*.

Operations, Westminster Ophthalmic, 1½ p.m.

ROYAL INSTITUTION, 8 p.m. Rev. Alex. J. D. D'Orsey "On the Study of the English Language as an Essential Part of a University Course."

WESTERN MEDICAL AND SURGICAL SOCIETY, 8 p.m. Practical Evening for the Narration of Cases, and the Exhibition of Specimens.

EXPECTED OPERATIONS.

Metropolitan Free Hospital.—The following Operation will be performed on Monday next, at 2 o'clock:—

By Mr. Borlase Childs—Lithotomy.

Westminster Hospital.—The following Operations will be performed on Tuesday next, at 2 o'clock:—

By Mr. Holt—Amputation at Shoulder-joint; for Contracted Neck; Amputation of the Breast; Removal of a Tumour from the Arm.

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PULVIS JACOBI *VER.*, NEWBERY'S.

To the Medical Profeſſion of Great Britain and Ireland.

GENTLEMEN,—We beg to call your attention to the following extracts from a Paper by the late John Cheyne, M.D., F.R.S.E., M.R.I.A., Phyſician to the Hardwicke Fever Hoſpital, Dublin, and Phyſician-General to His late Majeſty's Forces in Ireland, &c. &c., contained in the "*Dublin Hoſpital Reports*," *vol.* 1, *p.* 317.

"Since this caſe came into my poſſeſſion, I have been led to "make a good many clinical experiments, which have enabled me "to verify the reports which I had heard of the efficacy of JAMES'S "POWDER, in ſometimes removing the APOPLECTIC DIATHESIS in "perſons advanced in life. It is, moreover, worthy of obſervation, "that JAMES'S POWDER has been of remarkable utility in "certain inſtances of DETERMINATION OF BLOOD TO THE HEAD, which "occurred at an early period of life, and threatened to end by "effuſion. Laſtly, in two caſes of GENERAL PLETHORA, in which, "however, the head was more affected than any other part, "JAMES'S POWDER was exhibited by me with perfect ſucceſs."

Alſo *vol.* 1, *p.* 320.

"The following very ſimple method of exhibiting JAMES'S "POWDER, in caſes of undue determination of blood to the "head, is that which I have generally purſued. The patient is "made to begin with a very moderate doſe, not more than two "grains at bedtime, and to increaſe the doſe by half-a-grain every "night, until ſome ſenſible effect is produced upon the ſtomach, "bowels, or ſkin. Should the ſtomach be affected with ſickneſs, "the doſe muſt be leſſened by one grain on the following night. "By the addition of a little rhubarb to it, a larger quantity of "JAMES'S POWDER may be adminiſtered than the ſtomach could "otherwiſe bear. If the ſkin is ſoftened, or the bowels affected, "the doſe ſhould not further be increaſed, but it muſt be repeated "every night for a conſiderable length of time: in ſeveral inſtances "I have known eighteen or twenty grains taken for a conſiderable "period without any inconvenience."

The following extract (ſhowing the increaſing eſtimation in which the true Dr. James's Powder is held by Medical Practitioners) is taken from "The Lumlæan Lectures," 1858-59, delivered before the Royal College of Phyſicians, by A. Tweedie, M.D., Phyſician to the London Fever Hoſpital, who is admittedly one of the higheſt practical authorities on the ſubject of Fever. He ſays, ("*The Lancet*," *June* 16, 1860, p. 590,) as follows:—

"If the febrile excitement be ſuch as to require antimonial prepa- "rations, a pill containing 2 or 3 grains of James's Powder (prepared by "Newbery ſhould be taken at intervals according to circumſtances."

In writing to Meſſrs. Newbery, he ſays:—

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This ſubſtitution muſt bring diſappointment, and of courſe deter Practitioners from preſcribing Dr. James's Powder, or lead them to regard it as a preparation on which no dependence can be placed.

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These ends to be accomplished without interfering with the valuable time of the Members of the Profession, or exposing them to the unpleasantness which necessarily attends applications for money, or to the uncertainty and risk of employing private collectors.

2nd. To assist members with information and advice in the purchase and sale of Practices.

3rd. To raise a Benevolent Fund by devoting to that object the profits arising from the general operations of the Society.

The Society consists of qualified Medical Practitioners *only*. Annual Subscription, One Guinea; a Firm, consisting of Two Partners, a Guinea and a-half; a Firm of three Partners, Two Guineas. Fixed rates of Commission are also charged on Business transacted.

The general business is carried on by a staff of officers at the Central Office, 43, Lincoln's-inn-fields, together with trustworthy *employés* appointed in town and country, the whole of whom are under the direction and superintendence of the Committee.

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Chlorodyne.—R. Freeman, Pharmaceutist, Kennington-road, London, S., informs the Profession and Trade that he has for years made, and extensively used in his business, Chlorodyne; and that he is supplying it in one-ounce stoppered bottles at 1*s.* 6*d.* each, four-ounce bottles at 5*s.* each. He guarantees it to be uniformly and properly prepared, and superior to any other makers', though their charge be ever so exorbitant; and he trusts that the lowness of price at which he offers it will allow the Profession to use it in common practice and at public institutions, so that its extraordinary beneficial effects may be enjoyed by the poorest sufferer. Sold by all Wholesale Druggists.

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ORIGINAL LECTURES.

LECTURES
ON
THE SPINAL CORD,
DELIVERED AT
The College of France,
DURING THE SUMMER SESSION 1860,

By M. CLAUDE BERNARD,
Member of the French Institute; Professor of General Physiology at the Faculty of Sciences, &c.

LECTURE V.

ON THE PROPERTIES OF THE SPINAL CORD—(*Continued*).

Summary: Insensibility of the Spinal Cord when deprived of its Nervous Roots—In order to prove this, the Roots must be plucked off, not merely divided—The Operation does not otherwise injure the Spinal Axis—Experimental Proof of the Fact—Results of Unilateral Section of the Posterior Tracts—Sensibility and Temperature of the corresponding Parts increased—Experiments of Stanlius—Further Experiments of Turck and Brown-Séquard—Ingenious Method of ascertaining the Comparative Sensibility of Animals, or Sensorial Dynamometer—The Effects produced by this Mutilation are direct in the Lower Part of the Spinal Cord, and operate cross-wise in its Upper Portion—These Results Physiologically explained—Accumulation of Nervous Fluid below the Wound—The Effects of a complete Section of the Spinal Cord compared with those of a Unilateral Operation—Intensity of the Reflex Motions produced in such cases—Professor Fouquier's remarks on Patients affected with Paraplegia—Effects of Strychnia on Frogs which have undergone this Mutilation—Müller's Hypothesis—Experiments which appear to corroborate the Views of this Physiologist—The Spinal Cord is a distinct Nervous Centre, and acts independently of the Brain.

GENTLEMEN,—The intrinsic properties of the Spinal Cord, to which the greater part of the preceding Lecture was devoted, will continue to occupy our attention to-day.

In all experiments intended to exhibit the total insensibility of this central axis, when deprived of its posterior roots, no satisfactory result is obtained by merely cutting them away: it is altogether indispensable to pull them off; for, if the sensitive nerves implanted on the spinal cord are not in this manner entirely removed, we should never be able to prick the posterior tracts even with a finely-pointed instrument, without meeting some of the primitive fibres which grow out of the vesicular substance. In order to ascertain this negative property of the spinal axis, all vestiges of the sensitive fibres must, therefore, be carefully eradicated. It might of course be objected that an operation, which consists in tearing up by the roots all the filaments arising from the very depth of the nervous centre, must evidently disorganise it: such, however, is not the case; for, on pinching or otherwise exciting the nerves which emerge below the injured point, an acute sensation of pain is felt and distinctly expressed by the animal. Now, if the special properties of the central axis had been destroyed by the experiment, the impression produced upon the nerves would not have been transmitted to the brain, and the animal would have remained unconscious; the spinal cord, viewed in itself, has therefore not been disorganised by the avulsion of the posterior roots.

The dog now placed upon the table has undergone the operation this morning: four of the sensitive roots have been removed on one side; and the spinal marrow being laid bare, you will be able to convince yourselves that sensibility has disappeared in the corresponding region; while on the opposite side it still continues to exist.

[M. Bernard now performs the experiment. The posterior tracts are pricked with a fine needle; when this is done in the injured part, the animal remains motionless; while the slightest excitation brought to bear upon the other side causes the animal to utter loud cries.]

But such is not the only method of proving that the spinal cord is not the direct continuation of the fibres which pass from, or return towards it; supposing this to be true, the transverse section of the posterior tracts would destroy the sensitive powers at once, in the parts situated below the wound; and it was universally believed till lately, that such was indeed the case. But we are now perfectly aware that the section of the posterior tracts on one side, gives additional intensity to the sensitive powers, instead of paralysing them; the results of this mutilation are therefore quite different from those produced by dividing the posterior roots: in this latter case, all sensibility is suppressed in the corresponding parts; while, in the former, a remarkable degree of hyperæsthesia and an augmentation of temperature are simultaneously produced. These experiments are not of recent date; many years ago, Stanlius established that when the spinal cord had been divided on one side, in Batracians, no paralysis whatever took place; but that when the spinal cord was entirely cut through, both sensibility and voluntary motion disappeared at once. But the merit of proving that the sensorial powers do not only persist, but are even considerably quickened by the operation, belongs to Messrs. Turck (of Vienna) and Brown-Séquard. The latter of these gentlemen, indeed, attributes this result to a decussation of the nervous fasciculi along the whole extent of the spinal cord; so that the sensitive powers, which remain unimpaired in the mutilated tract, experience a partial paralysis in the other; but M. Turck has disproved this, by showing that the same amount of sensibility as before the operation is always found to exist in the undivided column; while hyperæsthesia is really produced on the other side. An ingenious method of measuring the degree of sensibility possessed by different animals, has enabled him to establish the fact; he may truly be said to have invented a sensorial dynamometer for this purpose. The following is the process employed:—The skin being exceedingly porous and delicate in frogs, these animals readily perceive the presence of acids in the water which contains them; the sensation appears to be quite as powerful when acidulated liquids are placed in contact with the skin, as if they were poured on the tongue. A few drops of vinegar being poured into a glass of water, the animal's legs are dipped into it; if the acid reaction is strong enough to be felt, the animal immediately withdraws its lower extremities; if, on the contrary, it is too weak to produce an impression, the limbs are allowed to remain in the glass. The degree of sensibility possessed by the subject may therefore be pretty accurately ascertained by the quantity of vinegar required to make it draw up its legs. When the mixture has been sufficiently diluted to cause the unpleasant sensation to disappear, that is to say, when the animal allows its limbs to drop into the water without attempting to remove them, the experiment takes place. The spinal cord having been divided on one side, and the animal having been allowed to recover from the shock, its posterior limbs are again dipped into the glass, the injured one is precipitately withdrawn, while the other is allowed to remain in the liquid as before. A considerable degree of hyperæsthesia must therefore exist on the mutilated side; and I believe that an augmentation of the motor forces is equally produced; this fact has not, however, been hitherto noticed. The result of the operation ought to be divided into two distinct periods; a momentary paralysis is at first produced; but when fifteen or twenty minutes have elapsed, the nervous excitability is increased, and remains in this state for a considerable space of time.

The effects of this mutilation are direct, in the lower part of the spinal cord: that is to say, its properties are disturbed on the wounded side; but in the cervical region, the reverse is the case; the modifications are produced crosswise in this part. In the medulla oblongata, the operation gives rise to phenomena of a peculiar kind, which we shall hereafter examine (a).

In endeavouring to explain this singular fact, how can the ordinary notions of physiology be reconciled with these startling results? It seems likely that an accumulation of nervous fluid (b) takes place immediately below the wound; a supposition which the effects of a complete division of the spinal cord would appear to corroborate. When this operation has been performed, a total paralysis of motion and sensation is observed in the lower extremities, the parts situated above the injured point retaining, of course, their usual properties. But in the paralysed portions of the body, reflex motion still exists; immediately after the operation, the movements provoked in this manner are insignificant; but let the animal be examined after being allowed to rest during a few minutes, and a remarkable increase of sensibility

(a) *Vide* Lecture XV.

(b) This expression must not be understood to convey any definite opinion as to the nature of the nervous agent.

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and motion will be found to have taken place; the animal remains, of course, unconscious of the nervous action which is going on in the lower parts of the body; the communication between the brain and the nerves being interrupted, the sensations produced are not felt by the subject, and the movements excited are involuntary. After a few days, if the animal has been kept perfectly quiet (by placing it under a glass bell in a cellar, for instance), the excitability of its lowe extremities will be so exasperated, that violent convulsionr are produced in the posterior limbs by merely striking ons the table on which it rests;—the upper limbs, of course, do not participate in this disordered activity.

Professor Fouquier had noticed, long ago, the existence of this exaggerated sensibility, of which the patient himself is unconscious, in cases of paralysis affecting the lower limbs. Reflex convulsions, he says, may be excited by tickling the soles of the feet, or otherwise acting upon the sensitive apparatus. Physiology, in this case, steps in to confirm the data of clinical observations; for when frogs, in which the spinal cord has been cut through, are poisoned with strychnia, convulsions are produced in the legs long before any are perceived in the upper extremities. And, lastly, the galvanic apparatus frequently employed in your presence for similar purposes, enables us to show that a notable increase of excitability has taken place; for the injured parts become infinitely more sensible to the action of galvanism than the sound limbs.

A variety of facts, therefore, evidently concur in proving that a notable augmentation of nervous power is created in the spinal cord, when its component fibres have been completely divided; when the operation is performed on one side, the exaggerated sensations are felt by the animal: when the central axis has been cut through on both sides, the impressions produced are not perceived by the brain, and only give rise to reflex motions, in which no voluntary impulse is concerned. Müller and some other physiologists believe these phenomena to result from an accumulation of nervous fluid, which occurs whenever the communication between the nerves and the brain is interrupted. Without adopting this hypothesis in its full extent, we are compelled to admit that in such cases, a large amount of nervous fluid collects below the wound, and that this accumulated force may be expended at will, by producing convulsions in the paralysed extremities. Let the animal be allowed to rest a few days after the operation, the slightest agitation will then give rise to convulsive movements; let the stimulus be repeatedly applied, and the nervous irritability will gradually subside,—the animal then relapses into the normal state. If, after this experiment, it is again allowed to recover strength, the same phenomena will again take place with equal intensity.

It is, therefore, an indisputable truth, that the spinal cord enjoys the property of generating nervous force; and that when its communication with the brain is intercepted, this force accumulates below the point where its columns have been divided; we here discover another proof of the total independence of this central axis, with reference to the brain; in other words, the spinal cord is not a mere prolongation of the encephalic mass, as has been often stated, but a distinct and independent nervous centre, possessing its own special properties, and exerting a direct influence over the nervous system.

ORIGINAL COMMUNICATIONS.

IS THE TURKISH BATH THE SAME AS THE ANCIENT ROMAN BATH?

By FRANCIS ADAMS, M.D.

In no other respect, within our recollection, has so great a change come over the Practice of Medicine in this country, whether for the purposes of Hygiene or Therapeutics, as in the usage of Baths. Forty years ago a small portion of the community, and generally those of the higher class, were in the habit of going to the coast in the summer season for sea-bathing; and hot baths were occasionally prescribed by Physicians in the treatment of diseases, especially of children; but as a general rule, the external application of water, either or preserving or restoring the health, had almost fallen into complete disuse in Great Britain. Now matters have assumed a very different aspect. Not only have Water Establishments on a large scale, like so many Temples of Health, arisen in suitable localities all over the country, but scarcely a private house of any great size has been built of late years, without the accompaniment of a convenient Bath. In short, an inhabitant of Britain might now join an ancient Greek, in enthusiastically proclaiming, with the Theban poet, that "Water is the best of things."

As a general rule in our British establishments, until a late date, hot and cold water, variously applied according to circumstances, constituted the entire system in use. A vapour-bath might be professionally prescribed for some peculiar case; but the Hot-air Bath was scarcely heard of, until an intelligent and zealous traveller in the East brought the Turkish Bath into prominent notice. Within the last few years this practice has been making the most rapid progress, and has not only been advocated by the regular Profession as a remedial means for various diseases of men, but has also been taken up with extraordinary zeal by the Veterinarians in the rearing and treatment of cattle.

On the nature of the process gone through in the Turkish Bath it is now unnecessary to say much, after the elaborate descriptions thereof which have appeared of late, more especially in the leading Medical and Veterinary Journals (a). Among these I would most especially recommend to all those desirous of obtaining accurate information on the subject to consult a learned and scientific lecture by Mr. Spencer Wells, published in No. 540 of the *Medical Times and Gazette*. Having a short time ago gone through this mode of bathing in an elegant Turkish Bath, lately erected in the neighbourhood of Aberdeen, I can speak confidently as to the general accuracy of the account given by the writer just mentioned.

Still there is one important question which has never been settled to my satisfaction, "Whether the modern process of bathing in our Turkish Baths be the same as was practised by the ancient Greeks and Romans in their public Thermæ?" Most of our late travellers and writers on the subject seem to assume that this is a settled point, so that I have some difficulty in venturing to dispute the question, and should not have presumed to do so if it had not been that I am prepared to uphold my opinion by authorities which can hardly be controverted; and it is a question which I had occasion to study attentively more than twenty-five years ago, and I have since had the satisfaction to find the conclusions then arrived at fully confirmed by one of the most intelligent scholars of the day, I mean Dr. Daremberg, of Paris, in his very learned annotations on Oribasius.

And here it may be observed, that the question is not one of merely archæological importance; but, on the contrary, that it is of a highly practical nature, having for its object to determine whether a certain sanitary usage, which it is now wished to introduce into this country, can appeal in its behalf to the experience of several centuries, while generally adopted by the inhabitants of what was emphatically called "the Roman world," when "it comprehended the fairest part of the earth, and the most civilized portion of mankind" (b).

It cannot but appear remarkable that there is not, perhaps, any other matter connected with the domestic life of the ancients about which there has been so much dispute and misapprehension, as regarding their method of using the public Thermæ. This is the more unaccountable, seeing that the information furnished in particular by two of the great authorities on Medicine is so remarkably distinct, as ought to have set the question at rest long ago, namely, by Galen, Court Physician in the second century to the Emperor Marcus Antoninus, and by Oribasius, Court Physician to the Emperor Julian in the fourth century (c). The latter is, in fact,

(a) See *Edinburgh Veterinary Review*, October, 1860.

(b) See the First Chapter of Gibbon's great work. At the period here referred to the population of the Roman Empire is calculated by Gibbon at above 120,000,000.

(c) It is singular that, with the exception of the author of the "Commentary on Paulus Ægineta" (vol. i. p. 69), and Dr. Daremberg ("Oribasius," t. ii.), scarcely any modern writer on the ancient baths appears to have been acquainted with the passage in Galen and Oribasius. Sir W. Gell, indeed, in his "Pompeiana," cursorily notices Galen, but without attaching much importance to his authority. The other he characterises as being a certain Oribasius! Even Becker, whose information is generally most complete on every subject he treats on, does not appear to have been well acquainted either with Galen or Oribasius. See in particular his "Gallus," in the chapter on Baths. Schneider, also, in his very elaborate edition of Vitruvius, betrays no acquaintance with the passages of Galen and Oribasius.

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avowedly the copyist of the other,—and taken together as representing their professional opinions at the distance of 250 years; and, looking to the high position and literary reputation of both, it is difficult to imagine any two names which should possess so much weight on the question now under discussion.

The whole procedure connected with the taking of the Public Baths, is divided by Galen into Four Acts, or parts, as follows (*Meth. Med.* x.):—

First Act.—This was performed in the Laconicum, or chamber filled with hot air, and appears in most respects to have resembled the Turkish Bath as now practised in this country. It was certainly in general dry, heated air (*aridus vapor*) that was used; but whether or not steam, as represented by some modern authorities, may not sometimes have been used instead, we have never been able to decide positively, having not found any ancient authority for the latter. Every word in Galen's description indicates that he considered this act as merely preliminary to the subsequent one. Many persons, he says, do not stand in need of evacuation by the pores of the skin; but on the contrary, being of a dry temperament, they require repletion rather than evacuation,—that is to say, in modern nomenclature, they stand in need of *endosmosis* rather than of *exosmosis*.

The *Second Act* was an ordinary hot bath of fresh water; and in the great Metropolitan Thermæ was always taken in a large reservoir adjoining to the Laconicum, called the Caldarium, capable of containing a crowd of persons together. This was regarded as the main luxury of the process (d), and was often protracted to an unreasonable length; and hence it came to be regarded by rigid philosophers and divines as tending to induce relaxation, both of body and of mind. The water was so shallow as to avoid any risk of accident by drowning, but still of such depth that experienced swimmers could skim along the surface of it.

The *Third Act* was accomplished in the Frigidarium, which, like the last mentioned, was a cistern or basin of large dimensions, and, as Galen inculcates, was taken for the purpose of bracing the body after the relaxation which it had necessarily undergone in the hot bath. The depth of the water would seem to have been more considerable than in the Caldarium, since it gets the names of *natatio* and *natatorium*; and even in the private bath of the younger Pliny, at his Laurentian Villa, several persons could swim in his cold bath (Ep. ii. 17) (e).

The *Fourth* and last *Act* consisted of certain processes gone through in the Tepidarium, an apartment filled with mild air, in which the bathers left their clothes at the commencement, and came thither again to resume them at the end; hence it was also called the Apodyterium. In it, further, as Galen explains, the sweat was wiped off and the body anointed with hot oil, so as to protect it on exposure to the weather. In a good many respects, it will be remarked that the Tepidarium pretty closely resembled the first apartment of the Turkish Bath.

The objects in all these different processes are thus described by Galen:—"The whole method of the Bath is compounded of parts quite different from one another, for, on entrance, the bathers are exposed to hot air, after which they enter the Hot Bath; then they go out into the cold; and afterwards they have the sweat wiped off. The first part may heat the whole body, dissolve its recrementitious particles, smooth down unequal determinations, open the pores of the skin and evacuate many matters retained within it. The second is calculated to promote imbibition of a wholesome humidity into the parts of the body which are parched and of a dry intemperament. The third part is adapted to cool the whole body, to brace the skin and strengthen the powers. The fourth is to evacuate the body by sweats without producing injury by refrigeration."

The modern reader at first sight, will be surprised to find that the process of sweating is described by Galen as being principally performed at the close of the procedure in the Frigidarium, and not in the Hot-air Bath. But Galen explains his views distinctly in the following sentence:—"Some persons after the Bath, wrap up their patients either in linen clothes, or in cloaks and robes made of unwashed wool, and cover them up closely all around, so as to produce freer sweating. But" [he adds, and we would direct attention to his words,] "there is not always any necessity to sweat the patient much after the Bath; for frequently we visit the Bath not in order to empty the body, but, on the contrary, that it imbibe moisture, and be softened when it is immoderately dried."

In this place it may be proper to remark, that Galen and his illustrious imitator express themselves, in general, as being anything but favourable to the process which now goes by the name of "shampooing." "No patient," say they, "unless labouring under filthiness or pruritus of the skin, requires to be scrubbed while in the Bath, for patients generally stand in need of being well replenished with moisture so as to produce the least possible fatigue and disturbance; and hence to be rubbed with soaps all of which contain pungent and desiccative ingredients, is most adverse to the very purpose and object of the Bath." He proceeds to inculcate that whenever such means are used, they ought to be immediately followed by a copious affusion of warm water. He reiterates the principle, that "since to relax and soothe are the great objects of the Bath, the process is to be conducted with as much gentleness and as little fatigue as possible."

We must not omit altogether to notice the exceptions which Galen makes to the use of this, his national system of bathing.

He remarks that many of those persons who are labouring under indigestion, attended with an overflow of pungent crudities in the system, and bilious eructations, including almost all patients in the earlier stages of febrile complaints, experience an exacerbation usually preceded by rigor, if exposed to the bath or to a hot sun, or any sort of exercise, whether by friction or otherwise. In particular he inculcates that all inflammatery affections are injured by immoderate heat, and also all persons of a dry and hot diathesis. Such, under these circumstances, are the effects of the Hot-air Bath. In the second part, or Hot-water Bath, if patients so circumstanced derive any relief, it is from the moisture and not from the heat of the bath. In the third department parts that are over-heated become gently cooled, the strength is invigorated, and those parts which are relaxed and loose become braced. With regard to the fourth act, which concludes with the application of oil or unguents to the body, he gives several special directions, such as that, when the bather is weak, not to plunge him at once into a cold bath, but to souse him with water of regulated degrees of temperature, beginning with tepid and gradually applying colder. After undergoing this process the body is to be partially dried and well rubbed with warm oil, which will not fail to produce perspiration. When copious sweating is desired we have already said, that Galen had in reserve systematic packing in oily robes or blankets. Besides this means the ancient Physicians had several other contrivances for a similar purpose, such as the bath of heated sand, troughs filled with heated air, and many other devices of a like kind (f). Now, we would not be understood to deny that the Laconicum may not in especial cases have been used to effect this purpose, but what we contend is made out by the most unquestionable authority is that to produce copious perspiration in the Hot-air Bath was not the general scope and purpose of the Roman system of bathing; and that, however thus used by individuals, it was never the established practice of the million. The practice of using hot medicinal springs, or spas, especially those about Baiæ, in the Bay of Naples, was in great repute at all times. They are celebrated both by Virgil and Horace. There were many other hot springs in different parts of the world. But we repeat these had nothing to do with the usage in the public Thermæ.

Galen strictly enjoins not to take the Bath immediately after eating or drinking freely, but to put off the administra-

(d) See Galen, *l. c.* The same opinion is strongly expressed by Paulus Ægineta, of the sixth or seventh century. "The warm bath is the safest and best, relieving lassitude, dispelling plethora, warming, soothing, softening, removing flatulence wherever it fixes, producing sleep, and inducing plumpness. It is expedient for all, man and woman, young and old, rich and poor."—I. 51.

(e) The Frigidarium in the Therma of Diocletian was 200 feet long, and 100 feet wide. It is calculated that the Frigidarium of the Therma described by Sidonius Apollinaris, must have contained upwards of 150,000 pints of water. At certain times the Frigidarium was the department of the Therma most in repute, as was the case in the reign of Augustus, who was supposed to have been greatly benefited by it, on the recommendation of his Physician Musa. (See Suetonius and Dio Cassius.)

(f) See in particular the note of Schneider. Vitruv. V. 10. Vol. ii. p. 388.

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tion of both until any disturbance created by the process has subsided.

He states, further, that both in looseness and in constipation of the bowels it is dangerous to use the Bath. In all cases of prostration of strength he inculcates that the Bath ought to be avoided, and hence, that persons labouring under nausea and sickness should be kept from the Bath, lest fatal syncope be superinduced. In like manner bathing is dangerous to persons of bilious diathesis, and to such as are subject to epistaxis, unless when the bleeding has been unseasonably stopped. Galen concludes by stating his approval of the bath in attacks on the pleura and lungs, when they are concocted, that is to say, when convalescence has commenced; but that when used previously the effects are prejudicial, by the heat and disturbance which they create.

I cannot omit the present occasion of noticing a very interesting report published in the "Edinburgh Veterinary Review" for October last, "On the Treatment of Certain Cases of Disease in Cattle by the Turkish Bath." Upon the whole it is very flattering, and we sincerely wish that the sanguine expectations of those persons, who are at present zealously advocating this method of treatment, may not be disappointed. But I feel called upon to avow my fears, founded on a lengthened experience in the treatment of pleurisy and pneumonia in the human subject, that the use of the Hot-air Bath in the early stages of pleuro-pneumonia in cattle, may not turn out so successful as has been anticipated. We have seen that the great Roman authority on Medicine decidedly condemns the practice, as being most prejudicial at the commencement of all such febrile and inflammatory diseases, and if I am not much mistaken the highest Medical authorities of the present day would concur in his views. Would a Physician of established character in London or Edinburgh order a patient, in an attack of pleurisy or pneumonia, to be put into a Hot-air or a Hot-water Bath? In the present state of our knowledge we can scarcely think he would risk the experiment, more especially having no better directed object than the hope of cutting short the disease by inducing copious perspiration. This leads me to add a few words on a fallacious principle in the treatment of diseases, which is apt to lead the young and inexperienced into error. It being a well-ascertained fact in derangements of the animal economy, that febrile and other acute complaints, when at the crisis, are often accompanied by sweats, it has been assumed that the sweat is the cause of the convalescence, and it has been supposed that, by inducing a proper perspiration artificially, the disease will at once be brought to a close. Nothing seems more feasible, and yet I am sure all Physicians of experience will join in saying, nothing can be more fallacious. On this subject I would beg to refer the reader to a very able essay by Sir Henry Holland (g). Still I am free to admit that the good or ill effects of the Hot-air Bath in inflammatory diseases of the chest are to be finally settled by experience, and if the veterinarians can teach us a practical lesson in this case, let us be grateful to them. *Fiat experimentium in corpore vili.*

After all that has been said, we can scarcely bring ourselves to doubt that almost every candid and intelligent person who maturely considers the subject, must admit that there appears to be a very decided difference between the Turkish Bath of the present day and the Roman Bath of Four Acts, described by Galen and the other Medical authorities. When this system fell into disuse, I am unable to say, having nothing to add to the learned disquisition of Dr. Daremberg, to which we have already drawn attention. As he well remarks, there is a passage from the works of Cassiodorus, quoted by Bacchius, which proves that the system must have been in operation in the sixth century. I see no reason at all to suppose that the Turkish system is a continuation of the Roman. On the contrary, there is the best historical evidence that the Roman Baths were suppressed after the prevalence of Christianity, owing to the immoral practices with which they came to be associated; and when *Bagnio* became a name of reproach. I should think it likely that the Turkish Bath is a Mahometan custom, the Bath, as is generally known, being a favourite accompaniment of the Moslem worship. But this is a subject on which we are not qualified to speak decidedly.

(g "Medical Notes," c. iv.

ON

PARASITIC AFFECTIONS OF THE SKIN.

By T. McCALL ANDERSON, M.D.

Fellow of the Faculty of Physicians and Surgeons of Glasgow, &c.

No. III.

It only remains for me now to make a few observations on the remedies applicable to the treatment of Tinea tonsurans in a general way, and then to indicate the minutiæ to be attended to in the removal of its three varieties (Herpes circinatus, Sycosis, and Herpes tonsurans).

Without entering at present on the discussion of the principles of treatment generally put into force in this country, I shall first of all describe what I consider the best means to be employed in the majority of cases, and which, adopted, primarily by the French school, and especially advocated by Bazin and Hardy, have been carried out with excellent results. The basis of this treatment follows as a corollary to what has already been stated with regard to the nature of the disease, that is to say, considering, as I do, that its essence consists in the presence of a parasite, I hold that its destruction is the *sine quâ non* of the treatment. But it has also been hinted at, that some states of the system seem to prepare a soil more favourable for the vegetation of the fungus than others, (although unfortunately their nature is not yet thoroughly understood,) so that it becomes necessary not only to take means to destroy the parasite but also to alter that peculiarity of the constitution which forms a predisposition to the disease. We have therefore to put into practice an *external* treatment for the destruction of the *exciting*, and an *internal* for the removal of the *predisposing* cause, and this leads me, firstly, to the *external* treatment.

Everyone knows that there are various medicines capable of destroying vegetable parasitic life, and it might be supposed that their application alone would suffice to destroy it; but, in order that these remedies be efficient, it is necessary that they be brought into immediate contact with the parasite. This can generally be done in the case of Herpes circinatus, and we see consequently that it is far the mildest and most readily cured of the three varieties of Tinea tonsurans, but in Sycosis and Herpes tonsurans this cannot be so readily effected, for, as previously shown, the parasite attacks the hairs as well as the skin, penetrating into their interior and is found embedded between their longitudinal fibres. It is, therefore, necessary, in these cases, to remove the hairs in addition to the application of parasiticide remedies. It is altogether useless to shave off the hair as many do, for we thus leave, embedded in their follicles, those parts of them which are loaded with spores. Were shaving sufficient, it would be very convenient, being so easy of performance, but nothing short of complete extraction is effectual. It may seem, to those who have not tried it, to be somewhat superfluous to give direction as to the mode of extracting the hair. The difficulty of the process, however, cannot be overrated, and many who have tried it have failed in curing the disease, and are, therefore, opponents to this method of treatment; but in these cases, the fault generally lay, not in the principles of treatment, but in the inefficient manner in which they were carried into practice. Many may, no doubt, call to remembrance my statement, that in this disease the hair is more easily extracted than healthy hair; but I meant by this that, owing to the ravages of the parasite in the hair-follicles, the bulbs of the hair become less firmly attached than healthy ones. For I must also call to remembrance another fact, namely, that the hairs become very brittle as the diseased process advances, and therefore, on attempting to extract them, those most diseased often break, leaving their unhealthy bulbs embedded in the follicles. In fact, the Physician finds the same difficulty in the extraction of the hair as does the Dentist in the extraction of a tooth, which, though loosely imbedded in its socket, is so much decayed as to break readily on the application of the forceps. It is this friability of the hairs which makes the treatment of Tinea tonsurans often more tedious than that of even the worst cases of favus; but more of this hereafter. It may seem a somewhat cruel thing to propose the removal of all the hairs from a surface which is often pretty extensive; but it is only

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in exceptional cases, where the sensibility is greatly exalted, that much pain is experienced, and in the majority of instances patients soon become accustomed to it, and, seeing the benefit resulting from it, are loud in their calls to have it continued. Besides, even were the pain considerable, this is no argument against it provided it be successful. No Physician abstains from a useful drug merely because it is nauseous, and no Surgeon withholds the knife on account of its causing pain. And also, when depilation causes much pain, a little chloroform may be given to deaden the sensibility, but cases requiring its use must be very rare indeed. Many Physicians, also, who object to depilation, have no hesitation in the application of the most powerful caustics; but I am very far mistaken if most people would not prefer the former to the latter, were it only on account of the less degree of pain produced, apart altogether from the results of these different modes of treatment.

There are three modes of extracting the hairs,—

1st. Extraction by means of the calotte.

2nd. Extraction by means of the fingers.

3rd. Extraction by means of forceps.

Of the calotte I shall speak hereafter, when discussing the treatment of favus, for it is chiefly in this latter disease that it has been put into practice. The extraction with the fingers is that adopted by the Frères Mahon, combined with combing and brushing the affected parts, but this process has not met with that success which might have been expected from it, and even the Frères Mahon do not now hesitate to make use of the forceps when the above method fails. The extraction with the forceps, then, is much the most successful, and to this process I now direct attention.

It is not every kind of forceps which is suitable for this little operation (see Fig. 4). They should be about three inches long, so as to be convenient to the hand. They should be made so that the two extremities come together very exactly and do not slide the one upon the other. Each extremity should be a couple of lines broad, so that a fasiculus of hair may be caught up at one time when required, and these should be furnished on the inside with denticulations after the manner of a file. It is of great moment that the denticulations be very fine and also blunt, else the brittle hair may be cut across by them, and they must of course be arranged transversely, for the hairs would slip through between them if they had a longitudinal direction. Forceps such as these are made by Mathieu (a), expressly for depilation, and are used by Bazin and others at the St. Louis Hospital. Some direction is also required with regard to their use. Care should be taken not to catch more than half-a-dozen hairs at the most, at one time, and even these must be in close proximity to one another. It is necessary also to avoid extracting them, except in the direction of their axis, else they are very apt to break off, their roots remaining still imbedded in the hair-follicles, and the benefit which would otherwise have accrued from the depilation would not be obtained. At the same time as the depilation is carried on, a parasiticide should be applied, that is to say, after clearing about a square inch of surface of all its hair, one of the ointments or lotions about to be mentioned should be rubbed in. This is very useful, for the parasiticide thus penetrates into the hair-follicles whose orifices are more patent immediately after the extraction of the hairs, and is thus brought into direct contact with, and acts upon the spores which remain.

Fig. 4.

Fig. 4.—Forceps for depilation.

If the diseased surface is not very extensive all the hairs can be removed at one sitting. As a general rule, as much as three or four square inches of surface covered by hair can be removed daily; so that even were it necessary to remove the whole of the hair from the scalp this may be done in a week or so. But the extent of surface capable of being cleared at one sitting will depend entirely on the patient, those who have very sensitve skins being very intolerent of depilation, in which cases we must be content with slower progress, the depilation extending over a period of two or three weeks according to the degree of intolerance and the amount of hair to be removed. In France, where this treatment first assumed a definite form, great stress is laid on the manner in which the depilation was performed; and, indeed, in St. Louis Hospital, servants are employed (*épileurs*, as they are called) whose whole duty consists in extracting the hair of those patients affected with vegetable parasitic diseases.

Their *modus operandi* is thus described by Bazin:—"Our depilators are seated, and cause the head of the patient to rest upon their knees. With one hand (generally the right) they hold the forceps as one holds a writing-pen—the other hand is applied to the part about to be depilated, with the thumb and index finger of which they put the skin on the stretch to keep it steady. They then extract the hairs, pulling them out in the direction of their axis, and only a small number at a time, two, four, six, or at most a small bundle. It is necessary to avoid depilating too quickly or too gently, there being an intermediate point which one can only arrive at after a little practice" (b).

Before commencing the extraction of the hairs it is of course necessary to cut the hair short, say within an inch of the skin, and by means of poultices to remove any crusts which may have formed, and are matting the hairs together. Bazin also recommends a layer of the oil of cade, which he says "destroys, in part, the parasite situated on the surface of the skin, extinguishes the sensibility of the scalp, and facilitates the extraction of the hairs." Did the oil of cade fulfil these conditions, it would certainly be of great value in the treatment by depilation. That it destroys some of the spores no one can doubt; but from what I have seen of this practice, I would be very chary indeed of admitting that it in any way deadens the cutaneous sensibility or facilitates the extraction of the hairs.

A question of great importance is, *When should the depilation be stopped?* There is no doubt that one depilation would be sufficient were all the hairs removed entire, and the parasiticide efficiently applied; but there is great difficulty in removing all the hairs, owing to their friability, and the depilation thus requires frequently to be repeated. Each successive depilation, however, becomes less serious; for we generally notice, after one extraction, that the disease is extinguished at some parts, and reappears only here and there, at those places namely where the hairs have broken in attempting to remove them. It is only these latter parts, then, which call for a repetition of the operation. After a little experience one can readily distinguish when the disease is eradicated, and when the treatment can be dispensed with. When the hairs shoot out with all the appearance of health, after depilation, their previous friability and twisted appearance being gone, and when the skin assumes its natural appearance, we can then withhold the forceps, and confidently expect a permanent cure. It must, however, be borne in mind that, long after the spores have been destroyed, secondary symptomatic eruptions may continue which do not require further depilation, but treatment founded on general principles, and varying according to the nature of the eruption. It requires very little clinical experience to distinguish the symptomatic eruptions from those peculiar to the parasitic affection.

Having now described the method of extracting the hairs, it remains to mention the best parasiticide applications. Of these the bichloride of mercury is one of the best, and the one most generally used; oil of cade and Turbith mineral are much employed in France. Sulphur is also good, although more successful in the destruction of the animal parasites. As for the excipients, water and glycerine are probably the best. Lard is also good, provided that care be taken to get it fresh, and not to keep it too long; for, if rancid lard is applied to the affected parts it favours, in a wonderful manner, the formation of secondary eruptions. The strength of the parasiticide to be used is a point of great importance. Two grains of the bichloride of mercury to an ounce of water is sufficiently strong, and a little alcohol or muriate of ammonia

(a) L. Mathieu, 28, Rue de l'Ancienne Comédie, Paris.

(b) "Leçons théoriques et cliniques sur les Affections Cutanées Parasitaires professées," par le Docteur Bazin, p. 79. Paris: 1858.

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should be used to facilitate the solution of the mineral. Sulphur is best used in the form of ointment, in the proportion of half-a-drachm to a drachm of sulphur to the ounce of lard. Turbith mineral is usually employed in the same proportion, and lard is the general excipient. Oil of cade may be mixed with glycerine or lard in the proportion of half-a-drachm to a drachm in an ounce of the excipient.

Whichever of these is employed, must be rubbed into the skin *during* each depilation, as previously mentioned, and *after* the depilation is completed, and the disease apparently cured, it should be continued for some time. The disease should not be pronounced cured till a considerable time has elapsed after the cessation of the parasiticide, and that for obvious reasons.

After the cure of the parasitic affection, symptomatic, especially impetiginous erruptions may be left, which must be treated according to their nature, and as they are produced by the irritation of the parasite or of the remedial applications, soothing remedies are generally the most useful. But, sometimes, the irritation which the disease produces is the means of calling out some latent diathesis (*e.g.*, an eczema, a psoriasis, or a syphilitic eruption), in which case, general remedies must be employed, in order to correct, if possible, that particular state of system.

Finally, we must, if possible, remove the predisposing causes of the disease. The nature of these causes has, as I have said, not yet been thoroughly investigated, and we must, therefore, at the same time as we attack the disease locally, attend to the general health, and be guided in this by broad, general principles.

It now remains for me only to say a few words with regard to the particular treatment of each of the varieties of Tinea tonsurans, and also of the other modes of treatment very generally in use in this country.

In cases of *herpes circinatus* (ringworm of the body) the application of a parasiticide is generally sufficient, as the down which usually covers the skin of the body is not impregnated with the spores, except to a very partial extent. In very hairy persons, however, it may be necessary to proceed to depilation, especially if the hairs are manifestly diseased. Herpes circinatus is an affection which not unfrequently gets well of itself, the parasite not having, apparently, the same hold as on the hairy parts of the body. When there are many patches of herpes circinatus on different parts of the body, it is best treated by sulphur or mercurial vapour baths, which act on the whole skin, and thus attack all the patches at once.

Sycosis must be treated both by depilation and parasiticides. When the diseased process has run very high and there is a great deal of suppuration and induration, it is, according to some, better to commence the treatment by soothing applications such as cataplasms of potato-starch combined with purgatives. I am not quite certain, however, whether it is not better to proceed to depilation at once, for the best way of removing the irritation is to remove the cause, and, besides, the hairs are much more easily extracted while the inflammation and suppuration are considerable. In the early stages of the disease depilation causes considerable pain, and, although well performed, some of the hairs usually break, leaving their diseased bulbs in their follicles, so that a second or third depilation, although only a partial one, is generally required. When the disease is treated in the advanced stages, after the formation of pustules and indurations, although the inflammatory and suppurative processes have destroyed the parasite almost completely, the depilation is just as necessary. For, although the fungus is all but destroyed, the diseased ends of the hairs remaining in their diseased and abnormally secreting follicles, act as foreign bodies and keep up the inflammation. At this advanced stage of sycosis, the results of depilation are certainly *marvellous*. The hairs are removed with the utmost facility, and one depilation is generally sufficient; but it must be combined with the application of a parasiticide lotion or ointment. It is almost incredible, to those who have not witnessed cures from this treatment, the rapidity with which a chin, twice its ordinary size, and covered with large tubercles, indurations, and crusts, becomes, in the space of two or three weeks, perfectly healthy in appearance, with this exception, that here and there patches of alopecia are left, which are permanent; but this is not the fault of the treatment, but the fault of the patient in neglecting to apply for advice in the earlier stages of the disease. In the treatment of sycosis, many are in the habit of applying strong caustics, a mode of treatment which cannot be too much reprobated; for unless it be carried to such an extent as to destroy the skin and haire-follicles, and thus produce great disfigurement, it is not and cannot be successful. I am glad to think that this mode of treatment is becoming more rare in the present day. Arsenic has always been a very favourite medicine in the treatment of sycosis, and its use, combined cod-liver oil, is highly extolled by Hunt, who seems to look upon it almost in the light of a specific. I can easily conceive that this remedy, so powerful in many other cutaneous affections, may act beneficially in changing the state of system favourable to parasitic development, although I have never had occasion to try it; but I can hardly think that it can cure the disease, unless, by changing the composition or qualities of the blood, it causes the death of the parasite. Besides, in examining the illustrative cases cited by Hunt, I am left in doubt as to the nature of the affection. Thus, some are described as labouring under a tubercular eruption of the bearded portions of the face, others as having been troubled with sycosis one year, and in another case the only thing we are told with regard to it is that *the* disease had existed, "on and off," for fourteen years. And on looking at the results of the treatment I find that one patient was "nearly well when he last applied," another is "believed to have recovered," and a third "absented himself, *probably* cured"!! Now, however much Mr. Hunt may have convinced himself of the efficacy of arsenic and cod-liver oil in the removal of sycosis, it is necessary to have more convincing proof than he has given us of its beneficial operation. And, even supposing that Mr. Hunt's treatment is capable of removing sycosis, it is not nearly so successful even by his own showing as the treatment by depilation and parasiticides.

In *Herpes tonsurans* (ringworm of the head) depilation and parasiticides form the best treatment. It is, however, the most intractable of the three varieties of Tinea tonsurans, owing to the friability of the hairs and the difficulty of extracting them entire. Depilation requires, therefore, to be frequently repeated and the cure is thus much retarded. This can, however, be always anticipated with certainty. Caustics have been much used in this affection, as in sycosis, but the remarks made with regard to them when treating of the latter apply equally to Herpes tonsurans. Shaving off the hair from the diseased parts, followed by the application of stimulants and combined with tonics internally, are often made use of, but the results of this treatment are not very satisfactory. Dr. Jenner recommends strongly an ointment composed of twenty grains of the ammonio chloride of mercury, and four drachms of sulphur ointment, which is certainly a powerful parasiticide. He states, however, that the removal of the hairs is *impracticable*, a statement which is far too sweeping, although there can be no doubt that the hairs break very frequently and that great patience and repeated efforts are required before a satisfactory depilation is attained.

(To be continued.)

SOCIETY FOR THE RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—This Society has just received from Edward Unwin Berry, Esq., residuary legatee and almoner of the charitable distribution of the estate of the late Richard Hall, Esq., of Sloane-street, a donation of £50.

ORGAN AND THE MEDICAL COUNCIL.—Mr. Organ, who forced the Medical Council to restore his name to the Register, from which they had erased it without having given him an opportunity of refuting the charge of "fraudulent representation" and "infamous conduct in a Professional respect," has been again before the Queen's Bench at Westminster. The Council had given him a notice of an inquiry, and on his failure to defend himself from the charges, had erased his name for the second time, and the present proceedings were taken by him to force them to restore it, on the ground that they had no power to remove it for any act done previous to the first registration. The judges ruled against him, and gave the Council their costs. This will, we trust, encourage them to do their duty in any similar case.

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REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

CONDUCTED BY
JONATHAN HUTCHINSON,
Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital,
AND BY
J. HUGHLINGS JACKSON, M.D.

WESTMINSTER HOSPITAL.

MUSCULAR ATROPHY FOLLOWING ACUTE RHEUMATISM.

(Under the care of Dr. ANSTIE.)

E. S., a single woman, aged 20, was first admitted as an out-patient, under the care of Dr. Anstie, about September 20, 1860. She had formerly been a servant, and had enjoyed excellent health until about three months before the date of her application to the Hospital, when she had a severe attack of acute rheumatism, which affected all the large joints. She recovered well enough from this, except that a considerable pain and a great sense of numbness and weakness of the left wrist and hand persisted. She soon found that the thumb of the affected hand had lost its opposing power, and that the ball of the thumb was wasting. The wasting progressed rapidly, and, as the thumb continued powerless, she applied for relief.

On being first seen she presented the general aspect of health: was of clear complexion and healthy colour, and tolerably stout. No complaint whatever was made by her, except as to the left wrist and hand. The hand and wrist were constantly very cold—not merely to her own sensations, but in actual temperature,—and of a livid colour. Common sensibility in the surface was much reduced; but, at the same time, there was constant aching pain, which at times, but not often, extended up the whole forearm, not, however, following the track of any single nerve. Anything which for a time raised the temperature of the part, such as long-continued friction, also temporarily alleviated the pain. The wasting of the muscles of the ball of the thumb was complete, there being absolutely no thenar eminence at all. The extremity of the thumb was also slightly flattened, and the flexor tendons seemed a little shrunken. The sensation of cold and numbness extended to the whole hand, which was slightly weak; the opposing power of the thumb was quite gone. There was no particular tenderness of the wrist-joint, nor could any be traced in the course of either median or ulnar nerve. The pulse of the left wrist seemed somewhat weaker than that of the right.

The most careful enquiries could elicit nothing whatever to account for this curious condition. No history whatever of any exposure to the influence of lead, nor any signs of its presence in the body could be traced. There was no history of any injury to the arm, nor could any tumour or other source of pressure on a nerve or vessel be discovered.

The case was from the first, of course, a very unpromising one. There seemed absolutely nothing to be done in the way of treatment except to put in force various measures to increase the constant circulation of the part. Long-continued friction, with the use of stimulating applications seemed to do no permanent good whatever. The patient tried a variety of these measures, combined with the use of steel medicine, in vain, and at last it was determined to admit her into the house so as to have her more constantly under observation.

On November 15 she was admitted under Dr. Anstie's care. She was ordered to keep the hand and arm immersed in water of as high a temperature as she could bear for half-an-hour every night and morning (holding the arm *dependent*) and to follow every such bath with friction and passive movements, continued for a long time. This plan was persevered in for more than a month, during which time, unfortunately, a slight recurrence of general rheumatism took place which had to be combated by alkalies, iodide of potassium, and subsequently quinine. (This new attack of rheumatism did not involve the weakened hand.) No good result followed this long continuance of the local hot bath, and it was then determined to try the effect of the instrument known as "Junod's boot," which by enclosing the paralysed extremity in a chamber exhausted of air, causes a great flow of blood to the part, which can be kept up so long as the apparatus remains on. For the first two days the instrument was kept on three hours at a time, but this produced no effect, the limb did not even get sensibly warmer, although it seemed highly congested. After this the boot was allowed to remain on ten hours at a time, and the effect of this prolonged application was to greatly relieve the pain and numbness, and to induce a feeling of comfortable warmth and perspiration, which lasted all the following night. From this time forward for ten days the application of the boot was continued for ten hours each day; but at the end of that time not the slightest advance was found to have been made as regards the restoration of the atrophied muscles, and there was still a complete absence of power to perform the motions of abduction, opposition, flexion of the first phalanx, or adduction of the thumb. All the muscles of the ball of the thumb seemed to be wasted past the hope of recovery, consisting apparently of mere thin layers of fibrous tissue. The case was given up as hopeless, and the patient dismissed.

Dr. Anstie remarked that it was curious that in this case all the four muscles of the thenar eminence should have wasted. Considering that their nervous supply is derived from two sources, the median and ulnar, the theory of pressure on a nerve by some rheumatic deposit is insufficient to account for the atrophy; nor can we explain this by any amount of obliteration of vessels which we can imagine possible as a consequence of the rheumatic affection. And yet the tendency to waste is so strictly localised to these particular muscles, and is so entirely absent in other parts of the muscular system of the patient that it seems incomprehensible as a mere result of general rheumatic poisoning. With regard to the treatment adopted, it may be noticed that iodide of potassium was taken for nearly three weeks in pretty full doses without producing the slightest benefit. Various stimulants to the muscles were at first employed, though not the sulphuret of potassium which Dr. Ramskill recommends. Electricity seemed entirely contra-indicated, and indeed would probably have only increased the mischief, if that were possible, by exhausting the small remaining contractile power which might still linger in the wasted muscles. And, finally, the ill success of the "congestive" treatment, which is often found so useful in the restoration of atrophied muscles, affords an illustration of the truth of Virchow's remark, that "the greater or less quantity of blood which flows through a part is not to be regarded as the only cause of the changes in its nutrition," and that, "we cannot, by offering a larger quantity of nutritive material, *compel* a part to take up more than it did."

KING'S COLLEGE HOSPITAL.

FOUR CASES OF STRANGULATED HERNIA.

(Communicated by J. W. HULKE, F.R.C.S., Assistant-Surgeon to the Hospital.)

The interest that ever attaches to so important an affection as strangulated hernia induces me to communicate the four following cases. The first two cases illustrate a fact which the recorded observations of Pott, Pelletan, Le Cat, Scarpa, and other more recent Surgeons have shown to be of not infrequent occurrence in congenital hernia—the division of the sac by septa or diaphragms into two or more compartments. In both the present cases the septa, though situated at the time of the operation, at the middle of the scrotum, much below the external abdominal ring, doubtless represented the imperfectly closed neck of the original sac, which had been pushed downwards by a subsequent protrusion; the tensity of the upper part of the sac in Case 2 certainly favoured the supposition of its recent date. A septum such as was present in these two cases greatly complicates and increases the danger, for supposing there is also a constriction at the external ring (and in these ruptures, from the shortening of the inguinal canal, the internal and the external inguinal apertures are brought together) the contents of the

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sac are subjected to a twofold strangulation. It is well known that in congenital ruptures the testis does not always occupy the same position; in some it remains in the inguinal canal, or just outside the external ring, the bowel slipping past it into the scrotum. Case 1 is an example of this, where the testis had stopped just outside the external ring, the bowel had slipped by it into the scrotum, and afterwards the neck of the sac (tunica vaginalis) had become incompletely shut off, and subsequently a fresh protrusion had pushed down the original neck of the sac (which then formed a diaphragm) which carried the testis with it in its descent. The authorised distinguishing mark of a congenital hernia—"the impossibility of feeling the testis,"—must be received with some hesitation, for in both Cases 1 and 2, the situation of this organ was distinctly recognised before the operations.

On what does the greater mortality after operations on congenital ruptures depend? It is a generally-recognised fact, but one that has not been satisfactorily explained. I think it can be shown that it is not because these are larger than other scrotal ruptures, nor because it is more frequently necessary to open the sac. Case 2 is a remarkable exception to a generally-accepted rule, that strangulation is a slower process in large than in smaller inguinal herniæ, and it forcibly shows that the time at which an operation should be done, is not to be measured by hours or minutes, but must always depend on the particular circumstances of each case. In the two cases of crural hernia, the constriction was formed by the thick neck of the sac, and by some tight fibres (from the deep crural arch) immediately outside it; in the first of these the sloughing of the sac was obviously favoured by the lax nature of its attachment to the neighbouring structures; in the second, carcinoma had never been suspected, the patient was said to have enjoyed average health, and was not known to have complained of his stomach. All these cases were treated with opium.

Case 1.—*Congenital Hernia—The Sac divided into an Upper and Lower Cavity, by a Fibrous Diaphragm—Operation followed by Profuse Diarrhœa and Vomiting—Death.*

John C., a well-made, healthy man, had had a reducible rupture, since infancy, for which he had not worn a truss. He was brought to King's College Hospital, on September 8, 1857, the rupture having become strangulated, and the Surgeon whose assistance he sought, having failed to reduce it by the taxis. His face wore a very anxious expression; he was bent with pain; his pulse was weak and quick; and every few minutes he vomited a sour, dark, coffee-coloured fluid. The rupture, which was on the right side, distended the scrotum to the size of a fist, and was very tense and tender. The right testis could be indistinctly felt about midway between the external abdominal ring and the bottom of the scrotum, at the back and outer side of the rupture. Chloroform was given and the taxis failing, I made a cut 2″ long over the external ring, where the obstruction appeared to be situated, and slit it. Being still unable to reduce its contents, I next opened the sac, which contained a little bloody serum and a large coil of small intestine of a deep mulberry colour, and found the internal ring quite free; I could pass my finger through it into the belly, and I could not detect any adhesions of the gut in the neighbourhood, but reduction was still impossible. Slitting open the sac and scrotum freely, it became apparent that the lower and back part of the sac communicated through a small circular aperture in a horizontal fibrous diaphragm, with a second lower cavity, which contained more intestine than the upper one. After notching this septum all difficulty was over. Notwithstanding the complete replacement of the bowel, vomiting of the same character as before the operation continued. Profuse diarrhœa set in during the night, and it could not be checked. The surface of the body became cold and clammy; the breathing hurried; the pulse scarcely perceptible; and forty-eight hours after the operation, the patient died collapsed.

Post-mortem, Twenty-four Hours after Death.—18″ of the upper part of the ileum, bounded above and below by a deep indentation were found, of a deep mulberry colour, spotted with black patches; the outer surface of this bowel was coated with recent lymph. A piece of the lower end of the ileum, of about the same length, was congested and bound by smooth adhesions of old date. There was no general peritonitis. The stomach contained a little bile-stained mucus, and its mucous membrane was closely speckled with dots of capillary hæmorrhage. The lower cavity of this sac contained the testis, which projected inwards from its outer wall, just below the septum, where it was fixed. The spermatic cord passed vertically upwards into the upper compartment of the sac, then horizontally inwards across its posterior wall to gain its inner side, along which it ascended to the external ring.

Case 2.—*Congenital Hernia—The Sac subdivided by a Horizontal Fibrous Septum—Intense Congestion of the Bowel, and Hæmorrhage—Death from Peritonitis and Gangrene.*

Thos. H., aged 44, had had a reducible scrotal hernia, on the right side, since early childhood. December 17, 1860, being in King's College Hospital with bronchitis, at 8 a.m., in a paroxysm of cough, the rupture slipped down. Within a few minutes of the occurrence of the accident the taxis was unsuccessfully tried by the House-Surgeon, who shortly afterwards gave it a second trial, assisted by chloroform; this also failing, a bladder of ice was laid upon the scrotum, which was elevated on a pillow. At 1.30 p.m. I found him with pinched, anxious features, a small quick pulse, lying on his back, with up-drawn legs, complaining of great pain and tenderness in the belly and rupture; he had vomited several times. The rupture formed a tense, elongated, hour-glass-like swelling, rather larger than two fists. At its lower and back part there was a spot which, from its greater resistance and want of elasticity, was probably the right testis; the left testis was free. The elongated, hour-glass shape of the rupture, and its first occurrence in early childhood, together with the obscurity of the corresponding testis, indicated its congenital nature. Although strangulation had only existed five and a-half hours, the symptoms evidently already indicated extreme danger. The taxis was gently tried with chloroform, but again failing, I at once operated, intending, if practicable, to leave the sac unopened. The external abdominal ring, which formed a very tight constriction, was exposed by a limited incision of the integuments, 2″ long; it was freely divided, as well as a small cord-like band of thickened fascia situated ½″ above it; but the hernia remained irreducible. The sac, at this part very thin, and closely applied to the gut, was opened, and its neck divided; after which the finger slipped easily at once into the abdominal cavity. On passing the finger downwards it detected a tense, horizontal diaphragm, corresponding to the external constriction, that subdivided the sac into an upper and lower cavity, which communicated with each other through a small central aperture. This additional impediment having been overcome, about 30″ of small bowel were easily returned. The part of the gut nearest the external ring was but slightly congested, but below this there was a large portion of a deep claret colour then out of the lower chamber of the sac followed several inches speckled with capillary hæmorrhage, and about 6″ of the deepest mulberry, almost inky in its blackness. A large quantity of congested but otherwise healthy omentum now came into view, and was replaced, a small cord adherent to the sac requiring division. The testis projected freely into the lower cavity of the sac.

Between four and six o'clock the same afternoon the bowels were moved three times, each stool consisting of firm fæcal matter with about three ounces of blood. Death from peritonitis, with symptoms of gangrene of the intestine, took place on December 20, at 3.50 a.m.

Case 3.—*Crural Hernia—Operation—Subsequent Sloughing of the Sac and Perforation of the Bowel—Death.*

Sarah A., a swarthy, shrivelled old woman, aged 60, was admitted into King's College Hospital on Saturday, Sept. 8, 1860, with a strangulated femoral rupture. She had been seen early that morning by Dr. Maurice Davis, who on the taxis being unsuccessful, at once advised her removal to the Hospital. Her pulse was 120, and very weak; she lay on her back, with updrawn legs, moaning with great pain in the belly, and was constantly sick. A woman who came with her, not inaptly compared the vomit to a "baby's motions." Her bowels had been obstructed since the previous Thursday, though she had taken purgative medicine.

The rupture was globular, of the size of a small apple, hard, and very painful. She was put thoroughly under the influence of chloroform, whilst I tried the taxis gently for a couple of minutes, and, as it failed, I made a cut, 1½″ long,

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at the inner side of the rupture, passed my finger down to Gimbernat's ligament and notched its edge. As this did not enable me to return its contents, I was compelled to open the sac, which was very loosely connected with the surrounding tissues; it contained about ʒj. of bloody serum, and 4″ of claret-coloured bowel. Three or four tight thread-like bands immediately outside the neck of the sac, formed the constriction; the bowel was easily replaced after their division. The wound was closed with a couple of stitches and a compress.

9th.—Pulse 100; breathing much oppressed by accumulating mucus; she has long had bronchitis. Tongue dry and brown.

12th.—Pulse 88. The skin-wound has healed. A small motion was passed last night; this was preceded by pain in the belly and nausea.

13th.—Pulse 116. The wound has reopened, and at its bottom a black membranous tube is visible.

14th.—Pulse 128. A second stool per anum.

15th.—Pulse 130. A small quantity of fæcal matter was passed per anum. The black membranous tube floats loosely in pus; it gives issue to a constant drain of light yellow fluid fæces, and flatus occasionally comes from it.

19th.—Pulse 126. She is much weaker, and is very torpid, scarcely answering when spoken to. Retention of urine took place.

22nd.—Death. The profuse flow of fluid fæcal matter through the wound had continued since the last date.

At the examination of the body, made on the following day, a loop of the upper part of the ileum was found glued by recent lymph against the internal crural aperture, corresponding to which there were several small perforations of the bowel, through which fæces escaped into the necrosed sac which formed the black membranous tube seen in the wound. The bowel which had been strangulated was congested, thickened, and rough with a coat of fresh lymph; about ʒjss. of flaky serum were ponded up against the inflamed bowel by the great omentum. There was no general peritonitis, and no other morbid appearances were observed.

Remarks.—Had I not certainly known that I had completely returned all the protruded gut (this was confirmed by the passage of fæces per anum), and felt assured that the compress had been so carefully applied as to preclude the possibility of any subsequent protrusion, I should have mistaken the necrosed sac for gut; the escape of fæces and flatus heightened the deception. The actual relations of these structures, however, corresponded to a diagram that I had drawn before opening the body. The fluidity and bright yellow colour of the fæces misled me to suppose that the upper part of the small intestine had been concerned; but it proved to be the lower end, so that these indications are not reliable.

Case 4.—Crural Hernia in a Man—Operation—Death Three Weeks afterwards from Hæmatemesis—Post-Mortem—Cancer of Pancreas and Stomach.

James L., an emaciated old man, with sunken, anxious features, walked into my out-patient room at King's College Hospital, April 25, 1860, complaining of great pain in the belly, obstruction of the bowels, and constant sickness; the vomit was not unlike thick pea-soup. These symptoms commenced four days before. His pulse was thready and intermitted. He had hiccough. He said he had been ruptured four years, but had never worn a truss; latterly his bowels had been habitually constipated, and he had taken much purgative medicine. In his right groin he had a tense, very painful, oblong swelling, 3″ long, and 1½″ broad, parallel to and overlying Poupart's ligament; it reached outward to within 2″ of the anterior superior spine of the ilium, and inwards to the spine of the pubes. The spermatic cord descended by the inner side of the swelling, and the finger could be passed up through the external abdominal ring. It was obviously a crural rupture. Chloroform was given, and the taxis was employed during two or three minutes, but without avail; I therefore cut down at the inner side of the rupture, outside the sac, and notched Gimbernat's ligament just as in the preceding case. Still unable to reduce its contents, I was obliged to open the sac, when I found the constriction was caused by a thickened fibrous condition of its neck; this having been divided, about 6″ of highly congested, dark coloured, small intestine were returned. The wound was closed with stitches and a compress.

29th.—The fourth day after the operation the bowels acted slightly for the first time. The wound being swollen and tender the stitches were removed, and a large quantity of pus ran out.

May 5.—The wound looked healthy, but he was very weak and talked incoherently.

9th.—Last night great restlessness and delirium. To-day he refused his food.

10th.—Improved, stronger, and rational. Bowels opened. Takes his food and wine again.

15th.—Since the last date he has steadily improved, and his bowels have acted daily.

16th.—At 3 o'clock this afternoon he sat up in bed, vomited a large quantity of grumous blood, passed three loose stools, and died collapsed half-an-hour afterwards.

The body was examined next day. The wound in the groin was found closed, excepting a small sinus, which ran only a short distance, and did not communicate with the abdomen, which was tympanitic. A piece of small intestine, of a natural colour, adhered to the abdominal parietes, opposite the crural aperture; the adhesions were quite recent, and, on tearing them through, the bowel gave way, forming a small round hole about 3″ in diameter, with soft, ragged edges. The peritoneal sac contained about three pints of serum. The stomach, distended with gas, contained also a small quantity of blackish grumous blood, which had come from a carcinomatous ulcer that had destroyed a portion of the lesser curvature of this viscus, about as large as a crown-piece. The thick raised edges of this ulcer adhered to the under surface of the left lobe of the liver, which thus made good the breach in the stomach. The pancreas was carcinomatous. The other viscera were healthy.

REDUCTION OF HERNIA, ASSISTED BY PLACING THE PATIENT ON HIS HEAD.

(Under the care of Mr. BOWMAN.)

[Reported by Mr. MATTHEWS, House-Surgeon.]

J. F., aged 49, was admitted into King's College Hospital, under the care of Mr. Bowman, January 9, 1861, at six a.m., with a large inguinal rupture on the right side. He stated that the hernia had existed twenty years, and that he had always worn a truss during the day. He said that two years ago the hernia came down, and not being able to reduce it himself, he applied at a London Hospital, where taxis was applied, and at the end of an hour and a-half was successful. The history of the present strangulation was that on waking at four a.m. he discovered that the rupture was down, and failing to reduce it himself after prolonged attempts, he at once proceeded, with great difficulty, to the Hospital.

On admission there was a large inguinal hernia of the right side, firm and irreducible. There was also a much smaller inguinal hernia on the left side. Taxis was immediately applied, first without and then with the aid of chloroform for about twenty minutes, but it was unavailing. He was then placed in bed, the thighs flexed, and a bladder of ice applied over the swelling.

At nine a.m. Mr. Bowman saw the patient. He had vomited bilious fluid, and was shivering violently, with great anxiety of countenance. The swelling was somewhat more tense, and apparently not yielding the least to attempts at taxis when the patient was on his back with his thighs fixed. It seemed advisable to proceed at once to an operation; but before doing so, Mr. Bowman determined to try the plan lately advocated, viz. placing the patient on his head and shoulders, the pelvis being raised and in a vertical position. The tumour had not been compressed between the hands for more than half-a-minute, before a portion of gut suddenly receded, reducing the tumour to three-quarters of its bulk; but although further attempts to reduce it were continued three or four minutes longer, they failed while he was in this position. It was, however, completely reduced soon after by the ordinary method of taxis.

STRANGULATED CONGENITAL HERNIA IN AN INFANT—OPERATION—RECOVERY.

(Under the care of Mr. PARTRIDGE.)

[Reported by Mr. MATTHEWS, House-Surgeon.]

H. B., aged 17 months, a weakly-looking boy, was admitted, under the care of Mr. Partridge, November 26, 1860, with a swelling in the left groin. The mother's account was,

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that the swelling had existed from birth, but had always disappeared when the child was laid down. The bowels had not been moved for twenty-four hours, and the child had been vomiting pretty freely. The mother noticing that the tumour did not disappear as usual, brought her child to the Hospital. On admission, there was observed a swelling in the left groin extending down into the scrotum. No appreciable impulse was felt in it when the child cried. The left testicle had not quite descended into the scrotum, and the right was felt in the inguinal canal. An examination of the swelling under chloroform did not lead to any satisfactory conclusion as to its nature. Taxis produced no diminution in its size, and, as the symptoms were not urgent, it was determined to wait. The child continued to vomit bilious fluid through the night, and was exceedingly restless, crying out when the scrotum was touched. An enema was given which brought away only a few small hard masses of fæcal matter. A grain of calomel was given but was immediately rejected by the stomach; the dose was repeated, but with the same result.

November 27.—This morning the child is cold and appears to be sinking. He vomits everything given him, and has had no evacuation of the bowels. The tumour is somewhat more tense. Mr. Partridge saw the little patient at 10 a.m., and determined at once to cut down on the swelling. Chloroform was accordingly given, and an incision an inch and a-half in length made, by pinching up a fold of skin, and transfixing it. The various subcutaneous tissues were then dissected through, and a membrane arrived at, having the appearance of hernial sac. A puncture was made in this, a small quantity of serum escaping, and on slitting it up on a director, a knuckle of intestine of a deepish purple colour protruded. The constriction, which was at the external ring, was readily divided, and the gut returned. As soon as this was accomplished, the testicle, which looked like a small purple cherry, started out of the wound, showing the hernia to be congenital. It was returned within the tunica vaginalis, the wound stitched up, and a pad and bandage applied.

As soon as the child had recovered from the effects of the chloroform, seven drops of laudanum were given, and he was directed to have one ounce of brandy in the twenty-four hours.

The symptoms were immediately relieved by the operation, the bowels were moved once in the same afternoon, and three times in the night. On the 29th the dressings were removed and the stitches taken out, the left testicle was found a good deal swollen, and the scrotum œdematous and tense. The belly large and tympanitic, but soft. The bowels open. The child's face was flushed, and the pulse quick and weak. A poultice was applied to the wound, which had begun to suppurate. He continued to take brandy, and took other nourishment in the form of milk, and beef-tea, well. Next day the child was better, and from this time improved steadily but rather slowly. The swelling of the testicle and the œdema of the scrotum gradually diminished. The tympanitis disappeared, and the bowels which were at first rather costive, became quite regular.

The child was discharged quite cured on January 5, 1861.

COMPOSITION OF THE PHOTOGRAPHIC IMAGE. — Mr. Spiller has made some experiments, from the results of which he concludes, 1st. That chloride of silver, when decomposed by light, is separated into its elements. 2nd. That this change does not usually extend to the whole bulk of the material operated upon, on account of the opacity of the darkened product mechanically protecting a certain portion of unaltered chloride of silver from the action of light. 3rd. That the degree and rapidity of reduction is influenced by the state of division of the particles, and by the presence of agents capable of absorbing the chlorine when liberated from its combination with silver.

PHYSICAL EFFECTS OF ARSENIC.—Schmidt and Stürzwage have made experiments on birds and animals, from which they draw the conclusion that arsenious acid introduced into the organism occasions a considerable diminution in the metamorphosis of tissue, which explains a fact well known to horse dealers, that horses fatten after the administration of small doses of arsenious acid. That quantity of fat, and of albumen, which corresponds to the depression in the excretion of carbonic acid and urea remains in the body; and if the animal receive adequate nourishment its weight increases.

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Medical Times and Gazette.

SATURDAY, JANUARY 26.

ASSOCIATION JOURNALISM.

THE *British Medical Journal* has once more changed its Editor and its form, in the hope of better fortune; it flutters its wings like a newly-freed butterfly, and invites us, old stagers and its old critics, with a triumphant tone, to look at it now.

We accept the invitation with much pleasure. We are glad to see the Council have been able to secure the services of a hard-working and rising Physician as an Editor. Every body praised the management of the late Editor; nevertheless, every body (who had to pay for it) seemed to be dissatisfied with the results—a curious circumstance in journalism. Perhaps he coquetted too much with the pecunious, solid *Quarterly Review*, for the impecunious weekly bantling to have all his nursing and all his pap; perhaps, it was shrewdly suspected that lively articles on the "Curiosities of Civilisation," although wondrously curious to the popular mind and pleasant reading to all, were incompatible with a due attention to the weightier matters of pathology and therapeutics. Be all this as it may, the Journal *had* a good Editor, and now we hope it has got a better. We most cordially wish him the most satisfactory success. It has also a new face and form. Instead of growing bigger it has grown less, and has come out as an imperial octavo. But we are told that this is due only to tighter packing; we have the same number of convolutions, only they occupy less space. As to the contents, we do not as yet (up to the 4th No.) see much difference, except that there is more gossip and small news. But then it is for the most part stale and old—yet new enough, we will allow, for the purposes of the Journal. There are already the usual symptoms of meddling on the part of "the proprietors," and the new Editor has to tell them in the third number,—what all his predecessors have told them—that they have a very cheap thing for their money. The price is even judiciously calculated for the slow arithmeticians amongst them—it is just 4½d. per number.

We think, however (to turn to the invited criticism), that our new colleague blows his 4½d. trumpet in rather too grand a fashion for a beginner. He says:—"The very objection which has been most prominently urged against the *Journal*—that the issuing of a periodical by a public Association is an undue interference with the commerce of the publisher and with trade,—forms, in our opinion, its especial claim upon the consideration of the Profession. A Journal which represents no individual interests,—which is swayed by no party feeling,—which has no commercial considerations to fetter its expressions or qualify its views,—is surely a desirable medium for Medical intercourse. And if we add to these peculiar advantages, which the *British Medical Journal* possesses, the other important fact, that it may be fairly esteemed as the

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mouth-piece of the Medical Profession in this country, we clearly enough establish its position on a firm and satisfactory basis."

What a wonderful piece of work this *Journal* is, compared with all others!—as, for example, our poor commercial selves. We have to pay contributors, and are very glad to get them at a reasonable price—trusting to a remunerating sale to return to us the outlay. This Benjamin of the Weeklies is above all such sordid commercial considerations. Its motto is, "Base is the knave that pays—or is paid." And then how high it rides above all the small failings of human nature! Like a veritable Rhadamanthus, it has no "interests"—no "feelings;" and with a lofty disregard of money, and all that, is the inexorably just, true, *only* mouth-piece of Medical opinion in this country.

Now, this is true or false; true it cannot be. The history of the *Journal* itself, and the leader in the second number of this reformed and re-virtued series, proves it is not true. False it is then, but, more, it is unmitigated nonsense;—worse than a crime, the puff is a blunder. No such Journal is possible, in the very nature of things. When it was first founded, this struggling periodical was the organ of the *Provincial* Medical and Surgical Association, which actually prided itself upon being *provincial*: it represented the views of the *provincial* party, and that party hated interference with it by any body whatever, whether in or out of the provinces. So that when an unfortunate member of the body ventured to differ with my Lord President of Worcester, at an annual meeting, (the only opportunity afforded the member for expressing an opinion,) the *Journal* not only came down on the recusant in a "leader," but inserted anonymous letters containing personal attacks upon him.

This kind of conduct had its intended effect: opposition was effectually silenced; but the Association dwindled and was threatened with bankruptcy. Then it became necessary in 1854 to endeavour to raise £1000 as "A Special Journal Fund," and it was also proposed to raise the annual subscription from £1 to 30s., to meet the outlay. Still, it was argued, (with an eye to the sordid consideration of money,) the *Journal* would be cheap; and "as the organ of," etc. (the usual puff,) it must be kept up. All this failed to bolster up the thing, which was avowedly and expressly provincial even when edited in London.

In 1855, Dr. Rose Cormack, the then Editor, who had done much to raise its literary character, and whom everybody praised, headed an opposition party, whose declared object was to widen the basis of the Association. It was actually proposed by these audacious Radicals, at the meeting of that year at York, that the Association should cease to be "Provincial" and become British. The Tories, at the instance of the paternal founder, opposed this revolutionary movement, and triumphed easily in a meeting of 50.

This was a staggering blow to the body, for away went the Editor, sick of his Sisyphean task, and the secession of many hundreds of members was threatened so seriously, that within two months of their victory the triumphant Tories rushed to Birmingham to undo the work of York. It was the well-known constitutional "purge" which drove them to this wise step, in spite of themselves. With the Association plunged into debt by the *Journal*, "a stoppage of the supplies" was imminent, and money must be had. "Perish the principle of Provincialism," said they, in the face of this danger; and so sordid "commercial considerations" triumphed. The Association was thus snatched from the bankruptcy in which the *Journal* had nearly involved it, and the British *Medical Journal* was forthwith ushered into the world with the usual jubilant *fanfaron* of the 4½d. trumpet. But it really remained just what it was—the object of constant complaints—the result being this new Editor and new metamorphosis, and a new 4½d. jubilation—to end, we fear, as all the rest have ended.

To say that no "individual interests" are represented by the *Journal* is simply to deny the influence of the Council in its management. This may be so; but if so, how comes it to represent the Association? Some think that it would be much to the advantage of the periodical if this Council influence were really and effectively exercised, and believe that "individual interests" and influences of a more private kind sway it. Let us examine, as to this point, the leader of the second number, which must have been written before the 4½d. trumpet was sounded. It professes to be a criticism of the "Cellular Pathology" of Virchow. No one, it might be supposed, would doubt the originality and powers of research of that very distinguished pathologist. It appears, however, from this Journal, that his lately-announced pathological theories are, without exception, plagiarisms. Thus runs the leader:—

"There can be no question, that all that belongs to territories around cells, and the brood cells, which form so important a feature in the theories of Professor Virchow, originated with Mr. Goodsir. *In the same manner* that the author has derived his leading views as to cells from one Edinburgh Professor, so he has *borrowed, and equally without acknowledgment*, his notions concerning leukæmia from another, viz. Professor Bennett. His theory as to fibrine and softened clots, is for the most part obtained from the observation of Zimmerman and Gulliver; and his views as to the diffusion of cancer are taken from Professor Van der Kolk. Indeed, throughout the book will be found a general appropriation of the ideas of other Pathologists, almost in every case presented entirely as his own, and the whole worked up in founding a doctrine," etc.

Professor Virchow dedicates the Second Edition of his "Lectures on Cellular Pathology" to Professor Goodsir, with the fullest acknowledgment of that eminent Physiologist's originality and priority. Why he does not pay the same compliment to the "other Edinburgh Professor" is known to the majority of Pathologists; the latter has no title whatever to priority as to leukæmia;—his claim to that was duly examined by Virchow at the time it was made, and with much moderation, for he might as justly have charged Professor Bennett with plagiarism from him. That Edinburgh Professor, when Pathologist to the Edinburgh Infirmary, published a case of "Death from *Suppuration* of the Blood" (a). It was really a case of leukæmia; but he did not know it, for he thought the white corpuscles he saw to be pus-corpuscles; and he was not not original even in this notion—for Mr. Gulliver and others held it. Two months previously, however, Professor Virchow had published a case in which he showed that these corpuscles were not pus-corpuscles, but white blood-corpuscles; he, therefore, termed the state Leukæmia.

It is not necessary to add comment; but a critic who can so recklessly assert what is untrue in fact, is not to be believed as to his other assertions, and must be held to be utterly incapable of giving a trustworthy opinion as to Professor Virchow's views. And, in truth, the two papers are only calculated to mislead. That "individual interests," and something more, have inspired them is plain enough; and from certain expressions they contain, it is a general opinion that Professor Bennett is the writer.

Now, we quite understand that our objects will be misinterpreted, and these criticisms, as on former occasions, attributed to interested motives. But we appeal to the thinking men of the Association, and ask them—for they all read this Journal—whether that immense body is not capable of better things for the Profession than bolstering up a Journal like this? Let them look at the state of the relief of the sick poor, whether by parochial or public charities, and ask themselves whether a thousand a-year would not be well spent in

(a) *Edinburgh Medical Journal*, October, 1845.

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measures for relieving the hard-worked Union Surgeon from his task-masters, and the officers of Medical charities from the frauds practised on them? Then, again, there is the political position of the Profession in the coming Parliamentary Reform—a question well worthy the utmost energies of the Association. A London Parliamentary Agent, of tact, would be a far more useful man than a London Editor, and the agitation of "Justice to the Profession" in the public papers more profitable than a Journal.

But this is the way the solid interests of the Profession are abandoned by those who should and can care for them. The Colleges take to selling licences and quarrelling with one another and the Universities; and this great Association, from which so much was expected, fritters away its funds and energies in attempts at cheap Medical Journalism which have never succeeded and never can succeed.

THE WEEK.

The whole Profession is shocked by the intelligence of the death of Dr. Baly, Physician to her Majesty, by an accident on the South-Western Railway on Monday evening. He was proceeding by an afternoon train to a consultation at Guildford, and was killed instantaneously, near Wimbledon, soon after leaving London. One of the most heartless, cold-blooded letters we ever read, even from a railway official, commencing with a statement that "the tender and four carriages were thrown off the line," and ending with the important announcement that "the permanent way remained uninjured," also states, *par parenthèse* as it were,

"By this unfortunate accident, I am sorry to say, one passenger has lost his life, apparently from having attempted to get out of the carriage before the train came to a stand, and two others have sustained serious personal injury."

One correspondent gives great reason to doubt whether Dr. Baly could have attempted to leave the carriage, and another gives the following touching account of our friend's sad end. He says,—

"At a spot precisely at the junction of the Epsom line with the South-Western main, in the flash of the lanterns that were moving in all directions, we observed that a tender and several carriages had been rolled down the embankment—some twenty feet at least—and were piled up in a hideous ruin between the two lines. It was not easy to learn whether any passengers had been killed or injured, many contradictory statements being made. Presently there was a gathering round one spot, voices were hushed, and people drawn together as around a grave. The moon was just rising above the trees, and loomed round and red through the haze upon a battered corpse that had but a few moments before been dragged from the wreck.

"The body was that of an elderly gentleman, unknown to anyone present. The spectacle it presented was too sickening to describe in detail. I have heard and read of railway accidents, but never before felt the indignation and sickness of heart which overpowered me, in common with all present, I believe, at that moment. There, bleeding and mangled in the midst of strangers, the gray hair covered with dust and blood, lay the beloved form of one for whom his family were at that moment waiting in joyful expectation."

We hope to be able to lay before our readers next week, some account of the life of the deceased Physician. We have been requested to state that the funeral is fixed for half-past one o'clock on Monday next, the 4th February, at Kensal Green Cemetery.

The Examination Papers of the Radcliffe Travelling Fellowship may be found in another column. The questions seem to be admirably adapted for testing the varied knowledge a Travelling Physician ought to possess. We are happy to find that Mr. Reginald Southey, a son of Dr. Southey, of Harley-street, obtained the Fellowship. We may remind our readers that Dr. Radcliffe charged his estate in Yorkshire with the payment of £600 per annum, to "two persons, to be chosen out of the University of Oxford, when they are Masters of Arts, and entered on the Physic line, for the maintenance of the said two persons for the space of ten years, and no longer, the half of which time at least they are to travel in parts beyond sea for their better improvement." The following alterations were made by an Ordinance, bearing date January 9, 1858:—

"The emoluments of the Two Fellowships of the foundation of Dr. John Radcliffe shall be applied, as the same shall become vacant, to the maintenance of Three Fellowships, to be called Dr. John Radcliffe's Travelling Fellowships.

"Each of the said Three Fellowships shall be of the annual value of £200 at least, and shall be tenable for three years from the day of election inclusive, and no longer.

"No person shall be ineligible by reason of his not being a Master of Arts of the University of Oxford and entered on the Physic line, but no person shall be eligible unless he shall have passed all the examinations required by the University for the degree of Bachelor of Arts and have been placed in the first class in the School of Natural Science, or (in case the period of ten years shall have elapsed from the time of the approval of this Ordinance by Her Majesty in Council), unless he shall have passed all the examinations aforesaid, and either have been placed in the first class in one at least of the public examinations of the University, or have obtained some Prize or Scholarship within the University, unattached to any College or Hall, and open to general competition among the members of the University.

"No person shall be eligible who shall not have made a declaration that he intends to graduate in Medicine in the University of Oxford, with the view of engaging in the practice of Medicine, and to travel abroad with a view to his improvement in that study, or who shall be, at the time of election, legally authorised to practise as a Physician."

At a meeting of the Irish Branch Council of Medical Education and Registration the following letter was read, which will interest those who are not tired of the Medical Title controversy:—

"9, Donegal-square, W., Belfast, Dec. 8, 1860.

"Sir,—I have the honour to request, through the Branch Medical Council, that my name may appear in the Medical Register with the additional title of 'M.D.'; as I am instructed by circular from the King and Queen's College of Physicians in Ireland, that 'the Licentiates of that College are entitled to the Degree and title of Doctors in Medicine, and to use the letters M.D. after their names.' I have to notify my change of residence also, and to request the alteration to be made in the Register for 1861, accordingly.—I have the honour to be, &c. SAMUEL BROWNE, L.K.Q.C.P.I.

"W. E. Steele, M.D., Registrar."

The following certificate was also read:—

"This is to certify that Dr. Samuel Browne was admitted a Licentiate of this College on the 16th December, 1859, and as such is entitled to have the additional qualification of Doctor of Medicine affixed to his name on the Medical Register.—By order, "WILLIAM MOORE, M.D.,

"Fellow and Registrar, K.Q.C.P.I."

Dr. Apjohn having vacated the chair, Dr. Porter was moved thereto, when it was resolved,—

"That it is the opinion of this Council that the higher Degree of Doctor of Medicine should be inserted in the Medical Register after the name of Samuel Browne of No. 9, Donegal-square, Belfast.

(Signed) "D. J. CORRIGAN, Chairman."

The humiliating condition of the stonework of the New Palace at Westminster was the subject of discussion at the Institute of British Architects on Monday. It was generally agreed that the stone was of a good kind, speaking generally, but that imperfect specimens had been taken. The magne-

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sian limestone when crystallised was imperishable; when amorphous, was easily decomposed by the sulphate of ammonia of our atmosphere. Ransome's solution of silicate was spoken of as the most hopeful remedy, and Czenling's was described as a failure. Meanwhile, will anyone compute the tons of coal consumed daily in London, the per-centage of sulphur in that coal, and the possibility of extracting this valuable element without allowing it to produce a poisoned atmosphere?

A recently-published novel, of the true hysterical class, popular possibly with ladies'-maids and the *demi monde*, makes Mr. Hancock one of its heroes. A dreadful accident happens: Hancock is sent for,—

"'Mr. Hancock is clever, is he not?' asked Hilda.

"'As clever, if not more so, than any man in London. He is Head Surgeon of Charing-cross Hospital, and I am certain whatever can be accomplished by human aid he can do.'"

So poor Mr. Hancock is made to attend—though by accident—and be present at a death-bed marriage, and may well say, "Save me from my friends!" The novel is called "The World's Furniture:" so far as the heroine is concerned "baggage" would have been a better title.

What is the "North London Hospital for Consumption," whose "North-west Branch" is said to be at 2, Russell-place, Fitzroy-square? The following absurd catch-penny resolution has been advertised on the part of the Committee of this Institution:—

"Resolved: That the request, already some time before the Board, of our Physician, Dr. Godwin Timms, for the use of twelve beds, when vacant, for the purpose of giving the Homœopathic Practitioners of London their long-sought opportunity of testing their mode of treating disease side by side with the usual method, be now granted; that six beds be put at the disposal of the Homœopaths, and six at the disposal of Dr. Timms for three months, and that a sub-committee, with power to add to their number, be formed to carry out this resolution."

Messrs. Grattini and Sommeiller, engineers of the new tunnel which is to bore through the foot of Mount Cenis, have constructed boring-machines worked by air compressed by hydraulic power, so that the same force which penetrates the rock supplies the workmen with pure air and expels the mephitic vapours which would collect in a long and narrow tunnel.

Since all particulars of the manner in which wounds may be caused are interesting to Medical readers, we may mention a case tried in the Exchequer Court, before Mr. Baron Bramwell, in which a poor man was condemned in a verdict of £100 damages for injuries inflicted by his very ferocious *wife*. It seems that the virago, having a quarrel with a certain person, fell upon another man whom she mistook for her enemy, struck him in the face with her fists, tore his forehead with her nails, and dragged out handfuls of his hair and whiskers. "It required the assistance of *two butchers* to separate her from her victim." The learned judge observed that it was a great pity the woman could not be personally punished, but that her husband "should chain her up, and not allow her to go out without him." A savage woman, he mentioned, was a most difficult creature to manage.

Dr. Kelly, of Pinner, pleaded guilty to the charge of receiving a lunatic into his house without the certificates and forms required by the Lunacy Act. He was discharged on entering into recognizances to appear when called on.

SPECIAL HOSPITALS.

On Wednesday afternoon, a General Meeting of the members of the Metropolitan Counties Branch of the British Medical Association was held at the rooms of the Royal Medical Benevolent College, 37, Soho-square, to consider the subject of Special Hospitals. Mr. Birkett was in the chair.

Dr. A. P. Stewart said: There had been a great amount of discussion with regard to the question of Special Hospitals, and last year steps were taken to elicit the opinions of the Profession generally in regard to it, and there was a memorial signed by many of the first men in the kingdom, very strongly and decidedly condemning the practice of establishing Special Hospitals. They considered the system was carried to so great an extent, that the supply of various kinds of patients was threatened to be cut off from the General Hospitals, and the opportunities for study taken from the general student. There were certain forms of disease which by common consent were thought to be appropriately cared for in Special Hospitals, if it seemed good to the charitable to establish them. One form of disease which had always been conceded, was that of phthisis. It was perfectly well known that in General Hospitals throughout the country, cases of phthisis were not received, quite as much for the sake of the patient as for the sake of others who were admitted with more acute sickness. In the wards of a General Hospital the air was more or less contaminated, and in the atmosphere of towns the deterioration in the health of phthisis patients was exceedingly rapid For some years he had himself transgressed the rule which existed in his own Hospital, as well as in others, against the exception of this class of patients; but latterly he had had such experience of the effect of receiving phthisis patients, that he found it absolutely necessary to refuse them, except in certain cases, such as attacks of bronchitis and pleurisy. In those instances where the case assumed an acute form, they found they could not refuse to receive the patient, but in a large majority of cases it generally happened that the patient sank rapidly after admission. For such cases there was no objection to the establishment of Special Hospitals in healthy situations where the patient's health might be benefited by the constant attention and the enjoyment of pure air, which they could not have from General Hospitals in the centre of a town. Of course, Hospitals for the same class of cases at the sea coast, where the conditions of life were much more enjoyed than in any inland situation, could not be objected to. But there were certain classes of cases for which there did not seem to be the least reason why Special Hospitals should be established. For instance, he did not see any disposition to refuse cancer cases in General Hospitals, so as to make the building of a Cancer Hospital at an enormous cost necessary. A few weeks ago, he went down to Brompton, and was astonished to see such a large and costly building set up for the purpose of receiving cases which it was notorious were received in all the Hospitals throughout the kingdom. It was only a waste of the funds subscribed by the chaaitable, to spend so large an amount in bricks and mortar, when by increasing the subscriptions to the General Hospital, a much larger number of cases could be received and attended to for one-third the cost. Then again, the establishment of these Hospitals necessarily made the support of those which already existed still more difficult. It was perfectly well-known that the difficulty of supporting our General Hospitals which had not a large invested property of their own, was becoming year by year a matter of greater difficulty. Notwithstanding all the attempts to economise, though made with great pains, and occupying a large portion of time both of the Weekly Board and of the Medical Committees, yet these attempts were not found to answer the end in view. He believed there were very few of the Hospitals not largely endowed which could make the income meet the expenditure within £1000 or £2000, and some of them even to the extent of £3000 and £4000, and one effect of this expenditure for building new places was to shut up portions of those Hospitals which were already established. There were other classes of cases which had brought the matter to what he might call the climax of absurdity,—the opening of an establishment for cases of stone last summer. It put the matter in so ridiculous a point of view, that at last, those who had

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been for many years feeling the growth of the evil and greatly objecting to it, were stirred up to take some further steps upon the subject, and the result was, a declaration by a very large number of the most prominent members of the Medical Profession throughout the kingdom against the establishment of these Special Hospitals. His own opinion was that this declaration, strong though it was, and which he was exceedingly happy to sign, need not be expected to exercise much influence upon the evil. The public mind must be enlightened on the subject, and it must be shown that the expenditure was in many cases vastly disproportionate to the amount of good done, and that it was not the best way of disposing of charitable funds for the relief of distress; in fact, it might be called an almost absolute abstraction from the funds available for relief. There were very few of our Hospitals, only two or three, that had attained the size of the great continental Hospitals, where it was known that with a staff of a certain amount, they could manage a much larger number of patients than we were in the habit of receiving into our Hospitals. Yet we had a staff capable, say, of managing a Hospital containing 200 or 300 patients, who, with a very little addition, could manage 400 or 500, or even more. It was like the organisation of a regiment; you had a number of officers, and you could extend the size of your regiment from 500 to 1000 or 1200 men, without any increase of the staff. But it really seemed that the further we went, the more necessity there was for multiplying staffs with a small number of patients, and so to make the expense of attending to patients increase to a maximum. There was another class of cases, which he mentioned at Torquay, to which his attention had been called a few days back, by the apparition in his wards of a case of lepra. It was a rarity which had been unknown in the Middlesex Hospital for a couple of years; it was almost impossible to get for the students such a thing as a case of skin disease to exhibit to them, and to give a lecture upon it. The last time he had the opportunity, was nearly two years ago, when he gave a clinical lecture upon a case of skin disease—one of that class of cases which Medical men must be continually meeting with in their private practice. And yet such was the effect of the Special Hospitals that this most common form of disease was withdrawn altogether from the ken of the general student in Hospitals. It was a very grave and serious mischief; it was impossible for the student to be careering all over London, visiting all sorts of Hospitals, in order to study different diseases. It was an evil growing so much, that soon it would force itself upon the attention of the Profession and the public. Considering the development which had taken place of late years, he really did not see where this system of subdivision of Hospitals for diseases would end. The evil would first tell upon those who were connected with them; and, secondly, upon the public, because, when attention was undividedly directed to one particular class of diseases, the view naturally became narrow, and there was a predisposition to see other diseases always in the view of that special disease to which the Medical man attended. Even with all his natural shrewdness—wonderful shrewdness—it was perfectly well known that, in consultation, Dr. Bright was often seeing kidney affections where kidney affections did not exist. It was a proof that the most remarkable and superior minds might be warped by an exclusive attention to one particular class of disease. This, again, exercised a prejudicial influence upon the practice of Medicine; he thought it infinitely better to bestow a general attention upon all the different cases which came before one in the ordinary exercise of his Profession, instead of seeking to concentrate his attention upon one particular class of diseases. He might be told that no man could contribute much to Medicine without being more or less a specialist. There was one sense of being a specialist very different from that which they were discussing. Those men who had done most for Medicine, not only in this but in all previous times, were men who, while attending generally to all sorts of cases that came before them, took care to make acquaintance with Pathology as extensively as possible. They took up one particular class of cases, having a general knowledge, and keeping up a general knowledge, of all the rest; but they selected that one for investigation, bringing their general knowledge to bear upon it. That was a very different thing from the specialty which they were dealing with—the concentrating almost exclusive attention upon one particular disease. One system could only do good to Medicine; the other, in the end, could only be productive of immense mischief. He had no intention of making these remarks, because he expected others would have been present to bring forward the subject. He should be glad to hear what objections were made to the statements he had offered, and in the meanwhile he would move, "That, in the opinion of this Branch, the establishment of Special Hospitals, especially to the extent it has lately been carried, is alike prejudicial to the interests of the public, of the sick poor, and of Medical science."

Mr. Webber said, although in the main he agreed with Dr. Stewart, that there were some points in his observations that he did not quite fall in with.

The Chairman: Are you about to second this proposition?

Mr. Webber said he was not going to do so. He was about to submit a proposition of his own—"That it is not expedient to extend Special Hospitals, more especially as affects a Special Hospital for Stone." Probably something might be said in favour of existing Special Hospitals, but if they were to go on having Special Hospitals in this way he did not know where the thing would stop; they might have a Special Hospital for the eye and another for the eyelid. If Dr. Stewart's resolution was to be seconded he would wait, but if not he should like to submit this proposition of his own.

The Chairman asked if any gentleman would second Dr. Stewart's proposition.

Mr. Henry Thompson said he agreed very much with the spirit of all that Dr. Stewart had said; still, he should not like to second the resolution, as it did not adopt a more definite line with regard to the Special Hospitals. Conceiving that Special Hospitals were in many instances necessary, he could not second a resolution which did not more clearly define what Hospitals were approved of, and what were not.

The Chairman said, as the resolution was not seconded, Mr. Webber was at liberty to proceed with his remarks.

Mr. Webber said there were Special Hospitals now in existence which, no doubt, had wrought an immense amount of good: that was admitted by every member of the Profession, but it was as well that there should be some limit put. If these Hospitals were calculated to advance science, there would be a fair pretext for them; but he did not think the necessity was shown with regard to Hospitals for any kind of disease. With regard to Hospitals for Deformity and Hospitals for Skin Diseases, he did not know that there was any very great objection to them. If they were to have Hospitals for Stone, and then by-and-by a Hospital for some other subject, it would be carrying the system to an indefinite extent, and London would cease to be a School for the study of Medicine, because pupils could not be expected to be walking all over London to get information when they could get it all under one roof elsewhere. Another evil result was, that it would be giving the public a good excuse for not subscribing to Hospitals. They would turn round and say, "You are constantly calling upon us for so many things, that we are getting quite tired of it." He could not see the parallel between the Medical staff of a Hospital and the officers of a regiment, which Dr. Stewart had drawn. It appeared to him that if anything was wrong, it was the present condition of our Hospitals. (Hear, hear.) They wanted to be reformed. (Hear, hear.) Let them reform those Institutions, and they would correct the evils which now existed. They would advance science and promote charity. But if they were to split up these Hospitals into a number of establishments, they would be splitting up the funds subscribed, and at the same time be diverting charity from its great object. With regard to the Hospital for Stone,—was its object to advance science?—what necessity had been shown? It was a well-known fact that there was a great scramble for stone cases in all Hospitals that at present existed; therefore with this scramble going on, he did not think they could be so numerous as to require a special establishment. In the next place, if experience was to be the object gained, he did not see how two Surgeons were to advance science much, or to give the Profession much experience, inasmuch as they were in a state of pupilage themselves. During his professional career he had operated upon a great number of stone cases, and he was able to give an opinion as to the difficulties which ordinarily surrounded them. In all the cases he had had to deal with, he had always been glad to have his Professional brethren around him, and collect their opinions upon the case as to what was best to be done. It was by this interchange of opinion that he thought science could be advanced. He should rather propose that

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instead of having a Special Hospital under such a management as that contemplated, it would be better to have special wards, and enlarge the staff in the principal Hospitals. He was perfectly satisfied that if they went on extending Special Hospitals they would ruin the Hospitals now standing, and would not advance science in the proportion in which it had been advancing up to the present moment. It was, no doubt, desirable to have Hospitals out of town for the sake of the country air, but would the Surgeons of the Stone Hospital be content to go and live in the country and attend to those cases? Surgeons should live in close proximity to Hospitals, and not leave it to juniors to carry out the work of attendance, because the ordinary treatment of stone cases was quite as important as the operation itself, and perhaps more so. Mr. Webber proceeded to reply to many of the statements in the prospectus of the Stone Hospital, and repeated his observation, that he did not know that there wes a necessity for a Hospital for the special treatment of stone, reminding the meeting of the great success with which Mr. Green and the Surgeons of the Norwich Hospital had operated in this class of cases. He also took objection to the system of admission into the Hospital, as it would rob the General Practitioner by admitting those who could very well afford to pay for attendance. Moreover, he should like to ask the Surgeons who proposed to undertake Special Hospitals, whether they would be content to receive a fixed salary, and give up their private practice. If they were content to do that, it would show that they were extremely interested in matters connected with the Profession. He did not know how it was, but there was a kind of feeling in our bosoms, when we got into a matter of this sort, to look a little to ourselves as well as the public. There was another thing with regard to this Hospital which he did not quite understand. In the year 1857 he proposed a Hospital for Genito-Urinary Diseases, but he thought it better first to ask the opinion of Surgeons of eminence in London as to its practicability. They were of opinion that the principal Hospitals fully provided for these cases. Among other gentlemen, he asked the opinion of Mr. Spencer Wells, who at once said the proposal would meet with a great deal of opposition, and he thought that it could not be carried out. Yet Mr. Spencer Wells was himself one of the promoters of this Special Hospital. With regard to existing Special Hospitals for the Eye and the Chest, perhaps there might be something said in their favour. Nobody would doubt that they were desirable. Probably there would be no objection to an Hospital for the Diseases of Women, or an Hospital for Deformities, because, had it not been for the Orthopædic Hospital, there would have been no room in London for that class of cases. The Eye Hospital was quite allowable, because to take eye cases into a General Hospital would be extremely bad; but with regard to a Hospital for Skin Diseases, that was a point open to observation.

Dr. Seaton said he had a resolution of his own to propose, to the effect, That the establishment of any Hospital for the exclusive treatment of a particular disease was objectionable: first, as tending to the waste of charitable contributions, and secondly, as having the effect of withdrawing from General Hospitals patients suffering from such particular diseases, which could not fail ultimately to be injurious to the interests of the public, inasmuch as the student in Medicine, who was to be the future Practitioner, would be deprived of the opportunity of fully studying the progress and treatment of that disease. For these reasons the establishment of a Special Hospital could not be justified unless there were an insuperable difficulty in the treatment of those particular diseases in the General Hospital. In his opinion the only justification for the establishment of a Special Hospital must be the want of provision in a General Hospital for the treatment of that particular disease, or the fact that the treatment of that disease would in a General Hospital be positively injurious to the interest and well-being of the general body of patients. That might be the case, for instance, with epileptic patients. The sight of a patient in an epileptic fit, would terrify and distress others very seriously, and mar the prospect of their making a good recovery. So in cases of phthisis, it was exceedingly probable that a patient could not be well treated when mixed up with a number of patients suffering from other diseases. Although he fully agreed with Mr. Webber as to a Hospital for Stone being most absurd, yet he wished to avoid specifying any particular disease. He would rather leave his resolution in that way, That the establishment of a Special Hospital was unjustifiable, unless there was not proper provision for the treatment of the disease, or if the treatment was likely to be injurious to the other patients. That was his resolution, and, for the purpose of saving time, he would submit it as a declaration of his views upon the subject.

Mr. Henry Thompson said it appeared to him that there were certain cases for which Special Hospitals might be necessary. They all agreed that phthisis, diseases of women, diseases of children, and mental diseases ought to be treated in special establishments. Then again, he would put under this head cases of deformity. If gentlemen had not paid great attention to that subject, and if they had not founded an institution, the Profession would not have had the opportunity of studying it. If they could be treated in connexion with the General Hospitals, so much the better; but if not, then he thought there could be no objection to the establishment of Special Hospitals. But there could be no doubt whatever, that in the General Hospitals no neglect could be charged in the treatment of urinary diseases: it never could be said by any patient that these were cases which could not be received and treated there. His resolution was, That the establishment of Special Hospitals for the reception of cases which are at present treated with unremitting care and interest in the existing General Hospitals, and for which ample provision is there made, is not only unnecessary, but very prejudicial to the interests of the patient, the Profession, and the public. He had appended to it "It appears from the foregoing that the establishment of the Hospital for Stone and Urinary Diseases is especially unnecessary and undesirable."

Dr. Seaton said his reason for wishing to avoid specifying any particular form of disease was this: there could be no instance of a special disease specified, where they would not find some gentleman who had a crotchet upon it. That was his reason for leaving his resolution in the way in which he had put it.

Dr. Stewart said he should be very much disposed to withdraw his resolution in favour of the proposition of Mr. Thompson. If there were included in it a few words to express the other idea of Dr. Seaton it would pretty well exhaust the subject. If there were cases for which no provision was made in a General Hospital, or might be attended with danger or disadvantage to other patients by being treated there, those would form the only two grounds which would alone justify the establishment of Special Hospitals. Even as the proposition now stood he should certainly prefer seconding it to any other motion that had been proposed. He also agreed with Dr. Seaton that it would be well not to specify any particular Hospital, as it was much better to deal with general principles than to descend to any details. Of course, everybody knew that it was the establishment of this particular Hospital which brought the thing to a crisis,—it did nothing more,—the evil had been growing for many years, but it was the establishment of that Hospital which really put the matter in so prejudicial a light to the Medical Profession and the public that it led to the present movement.

Dr. Seaton said, so great was his objection to specifying particular diseases that he felt reluctant to mention cases of epilepsy, though they might be provided for by an epileptic ward in General Hospitals.

A Member said he did not come to make any remarks upon the subject of Special Hospitals; he thought that the abuses of General Hospitals would be brought before the meeting. But he would request Mr. Thompson to leave out the passage with reference to the Hospital for Stone, although that was the ounce that had broken the camel's back. There were many other Special Hospitals, which were as objectionable as the Hospital for Stone.

Mr. Webber said he should withdraw his proposition, because Mr. Thompson's embodied all that he intended to say. He introduced the Hospital for Stone, because that was really the question upon which they were assembled to speak. It was the ground for the meeting, and he met it at once by saying that they did not want the Hospital for Stone.

Dr. Camps said Dr. Stewart had spoken of the staffs of Hospitals. The organization of the staff appeared to him to be very much the cause of the establishment of Special Hospitals. (Hear, hear.) Take the staff of some Hospitals, and

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it would be seen that an enormous amount of labour was thrown upon a few gentlemen.

Dr. Stewart said he did not refer to the Medical staff at all, but to the paid staff—matrons, nurses, and so on.

Dr. Camps said he included the staff generally, and he would take the Medical staff to begin with. (Question, question.) The Medical staff of many of the Hospitals in London was, in his judgment, almost, if not quite, inadequate to the amount of labour thrown upon them. (Hear, hear.) He believed it was that very circumstance, amongst others, which had led to the establishment of Special Hospitals as well as Dispensaries. How many Medical men there were possessed of skill and ability in the Profession equal to that of those gentlemen who were fortunate enough to be on the staff of our large Hospitals, and who would willingly lighten them of their labours and do a share of the work. These gentlemen wanted a field for their exertions, and being men of ability and activity they established Special Hospitals. Could any one blame them? As a practical man, that was a broad view of the question. He would not go further into detail upon that matter, because the present was not the time a general discussion, but he thought the gentlemen would catch his idea. For instance, Dr. Stewart very well knew that when he was Assistant-Physician at the Middlesex Hospital, he (Dr. Camps) frequently did duty for him for six months consecutively. At that time there was only one Assistant-Physician attached to the Hospital, and Dr. Stewart and himself gave the cream of their existence to the performance of its duties. They saw all the out-patients. In common justice to the Hospital, to the public, and to the rising young men in the Profession, there ought to be two or three Assistant-Physicians, at any rate. He believed the organisation of the Medical staff in some of our Hospitals, was, as he said before, the cause of the establishment of Special Hospitals. He would pass from that to another topic, and he hoped no gentleman present would think he was personal. Let them look at the precise condition and position of men whom he could count off by the dozen or the score, who were connected with the General Hospitals. They were admirable appointments, to which these gentlemen were most deservedly appointed; but unfortunately they were not satisfied with such an appointment; in addition to that they sought appointments to Special Hospitals as well. He did not wish to say it offensively, but it was the case. Suppose a gentleman was appointed Assistant-Physician to a General Hospital, say the Middlesex Hospital: there was really sufficient labour for him there, but that did not satisfy him; he must go and seek an appointment, say to the City of London Hospital for Diseases of the Chest, or the Fever Hospital. He had an appointment in a General Hospital, but he was not contented with that, he wanted to be a specialist, and he sought an appointment to a Special Hospital. It was just this kind of thing which led other gentlemen who were not so fortunate in obtaining appointments, but who possessed equal skill and ability, to say, "Oh! I will have an establishment of my own;" and in this way Special Dispensaries and Special Hospitals had arisen. He would not take up the time of the meeting further, but in his opinion the organisation of the Hospitals was at the root of the evil.

Dr. Richardson was very glad to see the meeting take so calm a view of the question, and not allow any kind of external feeling to enter in. This was the only way in which they could consider it; for his part he took no notice whatever of the protest signed by 300 or 400 gentlemen last autumn; he remembered that Sir Benjamin Brodie had signed it, but Sir Benjamin's opinion of such circulars was expressed in these words in a letter written only last October to the Secretary of the Royal Humane Society,—"I attach little importance to the names of 300 Medical men who are said to have signed a memorial on the subject, knowing, as I do, how easy it is to procure a great number of signatures to *any* document when you have two or three names to begin with." Those words of Sir Benjamin Brodie he re-echoed: they were amongst the very best words Sir Benjamin said, yet, strange to say, he signed the protest. In taking up this question they had to consider, first, whether our great Hospitals in London were fitted for the occasion to which they administered. That was the root of the question. In the first place, were they fitted to meet the requirements of the Profession as Schools of Medicine?

Mr. Thompson: May I ask if we are not called to discuss the question of Special Hospitals?

Dr. Richardson said he was coming to Special Hospitals, and he maintained that he was strictly in order. He could say that these large establishments were not fitted, as he conceived, to meet these requirements. He had gone into the question statistically, and he thought he should be able to show to the members some facts which would absolutely astound them. There were at the present time in ten of the large Hospitals 380,252 patients treated per annum; that was the very lowest number of patients that could be taken. This large number of patients were treated by 150 Medical officers, including even those called Consulting Physicians and Surgeons. If we came to analyse these facts it would be seen that if every patient were seen—

The Chairman: Are you speaking of in-patients?

Dr. Richardson: In-patients and out-patients. If every patient were seen but 8 times by his Medical man every officer would have on his hands 67 cases per day for 6 days in each week. Imagine such a state as that. He would repeat it, if every patient was seen but 8 times by his Medical man, every officer would have on his hands 67 cases per day for 6 days in each week. But he would go a little further; there were 30,169 cases treated in bed by what were called full Physicians and Surgeons; of whom there were only 82. So that each of those 82 had over 360 cases a-year under his care, which multiplied by 16 visits per patient would show the amount of attendance he had to give. Could we conceive, in the face of those facts, that the general Hospitals meet the requirements of the Profession. He did not mean for Students, but for Practitioners themselves. Then, to put another question. Were these Hospitals fitted for the benefit of the sick? Could 150 members of the Profession properly attend to upwards of 380,000 cases in a year? It was impossible; and they were obliged to leave the cases in the hands of juniors, of pupils who had only, as it were, just come from school. Then he would take the question of success,—he would take the two operations of ovariotomy and lithotomy. During the years 1858, 1859, and 1860, ovariotomy was performed in six General Hospitals in London by 7 Surgeons in 12 cases: the 12 women were all dead; only one recovered even temporarily. He would take lithotomy in the same way, from January 1854 to July 1857, there were 186 cases: of these there were 146 who recovered and 40 died. 137 were under 20 years of age, of whom 123 recovered and 14 died, so that of 49 adults operated upon in the London Hospitals in those three years 23 recovered and 26 died; or more than one-half. The fact was astounding.

A Member: Are you sure you are correct?

Dr. Richardson was sure he was correct. Then he would pass to lithotomy in the provinces. In four years and a-half there had been 175 cases: recoveries, 153; deaths, 22. Of these 121 were under 20, of whom 113 recovered, and 8 died. Of the 54 adults only 14 died, 40 recovered. In London, about 30 would have died, and 26 recovered. He believed these statistics were reliable; how they might be explained he did not know, but he attributed the difference to the hygienic management of the London Hospitals, and to the overcrowding of them, and to the fact that very frequently, so bad was the management, that contagion spread, and the patient was carried away. In one of our Hospitals lately, an operation for stone was performed on a child, who afterwards died of scarlet fever, caught from a scarlet fever patient lying in the next bed. Another argument that he brought forward was, that although these General Hospitals were so grand, they did not set up such a high standard of ethics in the Profession. Every week he saw advertisements in the papers, that Mr. So-and-so would perform some operation at such an Hospital. Crowds of students and others would go to that Hospital, not to study the operation so much as to witness the skill of the operator. He had seen them go in crowds to such Hospitals, and he had seen the great gladiator enter the theatre. The poor patient was brought in, and then the men around, instead of looking at the operation, would be looking at their watches to see how quickly the operation should be done. They saw nothing, for, *magno presto*, out came the forceps—and all was over. He maintained that this was as plain advertising as anything he could conceive. The students did not go to see how the operation was done, but simply to applaud the Magnus Apollo. And that these

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men were anxious to carry off all the applause was shown by the fact that they would never let a junior interfere with them in their career. Therefore, the Hospitals became close boroughs, in which only a favoured few were allowed to luxuriate. Then the *morale* of our great Hospitals was bad; he said, without fear of contradiction, that, to let patients lie in wards where they saw other patients for hours dying, or carried out of the room when dead, must be a bad system, and must be injurious. The public ought not to allow such a system to go on, and if they knew it they would not permit it. He had himself witnessed a case of death arising from a patient seeing a dead body taken out of the ward. Then, he said, with regard to these General Hospitals, a reform was necessary—(hear, hear)—and that reform required a larger staff, and suburban positions for our Hospitals—(hear, hear)—and better regulations, so as to admit all classes of cases, general or special. Until these reforms were introduced the evil complained of never would be touched. If the Profession did not choose to take up the question themselves, it would be necessary to enlighten the public, and get them to do it. Turning to the case of the Special Hospitals, he would ask, Why all this rage against them? To a very great extent they had the logic of the question in their hands. He did not defend Specialism in Medicine as an abstract thing. He disapproved of it altogether. It could do nothing for science so well as a system based upon general principles, but all who agreed with the general protest that had been advanced against Special Hospitals had their own exceptions. One man excepted Phthisical Hospitals, others excepted Fever Hospitals. Now, he maintained that if it was right to treat any one class of diseases at all in a Special Hospital, it was equally right to treat other classes of disease in the same kind of establishment. If it was right to treat a fever case at all in an Hospital, the patient was better among a number of other patients than focussed down among the fevered patients of any one ward. If it was right to treat ophthalmic cases in Hospitals, why not have Ophthalmic Surgeons specially appointed? A reform was required, and if a reform was not introduced they might go on for ever extending their Special Hospitals. The logic was with them. Let them see what had been done in the respective Hospitals. In three years twelve women died in General Hospitals from ovariotomy operations; not one who was operated on recovered. Without wishing to say anything either for or against any one individual, he must speak the truth, and say, from certain knowledge, that he had been present at many similar operations in a Special Hospital. Well, in three years there were twelve operations performed by Mr. Spencer Wells, the same number as in all the other Hospitals put together, and of these twelve cases there were seven who recovered entirely, one recovered for many months, and only four died; whereas *all* the women treated in General Hospitals died: therefore it was not just to rage against these Special Hospitals that they did not do public good. In his own Hospital (where he had worked for the reason that he had not scope elsewhere) he believed great good was done, and he believed if they could get at the statistics of Special Hospitals they would not stand behind General Hospitals as regarded benefit to the poor. With these feelings he could not allow the motion of Mr. Thompson to pass without moving an amendment.

The Chairman: Mr. Thompson's motion is to be altered.

Mr. Thompson said he had made a little alteration in order to meet Dr. Stewart's suggestion.

The Chairman: Dr. Richardson will excuse me for stating this fact with regard to the management of Hospitals. He should remember we have not the slightest control over the management of any of our Hospitals. So far as I am aware, where Medical Officers have offered an opinion, it is generally thwarted. Directly you suggest what may be thought an improvement, so much greater is the chance of its not being carried out by the governors.

Dr. Richardson: It is to the public I address my observations as much as to the Profession.

Dr. Edward Smith was exceedingly sorry that this matter had been brought before the meeting. He could not see the good of thus perpetually meddling with the question. In the first place, what importance could be attached to the opinions of the few gentlemen who were assembled round that table? This perpetual objection to any one thing was sure to increase the evil. Was it not so in everything in life? If they had left homœopathy and hydropathy alone they would have died out long ago. It was this perpetually interfering with little questions that tended to magnify the evil. With regard to the observation of Dr. Stewart, he thought this would be generally felt as the wail of those who belonged to the General Hospitals, as opposed to Special Hospitals, and the ground of this wail, so far as it was publicly given, was made with reference to the students themselves. It was said that by taking away classes of cases from the General Hospitals you did not get a sufficient variety of cases for the instruction of pupils. Let him call attention to the system on the continent. Why was not that system carried out here? Because of the pecuniary advantage which was had in view. Each individual Hospital charged a certain fee for attending that Hospital, and if a man went to another Hospital he must pay another fee. It ought not to be so. There ought to be such a combination of Hospitals here that a man having paid a fee for admission to one, should be entitled to go into every Hospital. By that means he would get a wonderful advantage. There was nothing he should enjoy so much as to have the *entrée* of different Hospitals; but he could not, even as a practising Physician, go from one to the other without paying fees. Take the condition of things in Paris. There there were Special Hospitals and General Hospitals, with special wards in them. If he went there as a pupil and he paid a certain sum, it freed him to every Hospital. They would see the immense advantage of this. If he wanted to go and study skin disease, he did not go to a General Hospital, but to a Hospital for Skin Diseases, because there he had a great institution filled with cases, to which he had access. Take, again, the special diseases of children; they all knew what the Special Hospitals in Paris for that class of disease were. He therefore maintained that to be consistent in London they ought to carry out the same plan that was carried out on the Continent. There ought to be a mutual arrangement among all the Hospital Physicians and Surgeons, that every student entering at the various Schools in London and paying a certain fee, should have the *entrée* to all of them. They would then have the advantage of congregating the whole of their cases together, and of studying them in detail at the different Hospitals without increasing the fee. As to their students not having time to go from one to the other, he believed there would be plenty of time. In Paris he found plenty of time to visit the different Hospitals. Let them throw open the Hospitals, and they at once would meet the difficulty that existed. They must take it as a fact, that Special Hospitals did exist. They could not destroy them, and it would be wiser, in discussing the question, to take it as a fact that they did exist. It was easy to show that there were good grounds for their existence. Every Tuesday at his Hospital he saw about 150 cases of disease. Every Friday he had about 120. His colleague, Dr. Pollock, who had the heavier days—Monday and Thursday—saw 171 on Thursday week; therefore, to tell him that there was no room in the Metropolis for Special Hospitals was useless. It was manifest from the nature of things that these cases could not have been seen at a General Hospital. If they took away the Special Hospitals they must not only reform, but enlarge, the General Hospitals and increase the staff. He took it as a principle to be laid down and acknowledged, that there was a necessity for Special Hospitals. Upon the question of money, which had been spoken of, was it not an understood thing among all philanthropic Institutions that the greater the number of good philanthropic objects you started with, the greater amount of money you got, and the greater amount of sympathy you evoked from the public? In the case of their own Hospital, they had an income of more than £8000 a-year. They had received since its establishment £100,000. He maintained that the sympathies of the public were called out by Special Hospitals. Again, something had been said of the absurdity which attached to this movement, yet everyone who objected to Special Hospitals admitted that they were required for certain cases. Insanity, skin disease, infectious disease, consumption, diseases of women, diseases of children, deformities—almost everything—had been mentioned. Again, when a man wanted any special operation performed, he immediately sent for a specialist. If a man wanted a Physician for his wife, to whom did he go but to the man who had got a reputation as a specialist in the particular class of disease from which his wife was suffering? He could only say, again,

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he was sorry the question had been mooted. He thought it would be better to move the previous question, and thus let things remain in *statu quo*.

Mr. W. Adams said he would gladly second that resolution, because he concurred in the observation which Dr. Smith had made. It disposed of the subject in the best way. The small attendance on that occasion showed the small amount of interest which was taken generally in the subject by the British Medical Association, which they represented as the Metropolitan Branch. It was too late in the evening to enter further upon the great subjects which had been discussed: they had been sufficiently ventilated. He was glad to see the discussion divested of all personality—or rather that the specialty which at first entered into it had resolved itself into general principles. The observations of Dr. Richardson, however, would go far on the opposite side to show that on general principles the resolution of Dr. Stewart could not be sustained.

Dr. Gibbon said that the abuses in the General Hospitals were at the root of the matter. Had reforms been introduced into the General Hospitals, there would have been no necessity for Special Hospitals. He could not blink the feeling that the Special Hospitals had risen to meet a demand. He had frequently met with cases where the poor, on going to General Hospitals, were neglected. An Assistant Physician could not prescribe for four or five hundred patients in an afternoon. He had made a calculation with regard to the number of patients attending one of our large Hospitals. Each Medical man, who attended two days a week, saw 120 fresh cases every time he went: it was absurd to suppose that he could give the time to it.

Mr. Wm. Martin wished to ask whether the establishment of Special Hospitals had not taken the subject out of the hands of quacks? And whether the Special Hospitals had really injured the General Hospitals, or whether, on the contrary, they might not be made to feed the General Hospitals, even with the subjects of those specialties? Take the case of Moorfields Ophthalmic Hospital,—had that injured the General Hospitals as regarded cases of ophthalmic Surgery?

Mr. Thompson: No one has ever objected to Ophthalmic Hospitals.

Mr. Martin very much doubted whether the Special Hospitals abstracted from the number of special cases admitted into General Hospitals. It might the case with regard to the skin diseases in Dr. Stewart's Hospital, but if special wards for skin diseases were instituted in that Hospital, with all the appliances that could be required, would there not be plenty of cases of skin disease coming in?

After a few remarks from Mr. Webber,

Dr. Richardson submitted the following amendment:—

"That a liberal scheme in the organisation of the General Hospitals, is the primary consideration in Hospital reform, while the system of Special Hospitals is a secondary consideration, and often the result of necessity."

Dr. Camps: I second that.

Mr. Thompson said he could not, as an Hospital Surgeon, allow Dr. Richardson's figures to pass without remark. First of all as to the number of patients, he quite agreed that there should be larger staffs attached to the Hospitals, and he was ready to promote that object to the best of his ability. But it should be recollected that the Physicians and Surgeons of our Hospitals had the assistance of a numerous body of young men, active, intelligent, and educated, who could not be taught anywhere else. He might venture to say there were at least 500 young men helping the 150 Physicians and Surgeons right and left.

Dr. Richardson: That is not what the public pay their money for.

Mr. Thompson observed, the public also paid for young men to be properly educated in their profession. Young men must be taught, and how else could they be taught? He wanted to put that question fairly. He agreed with the inference drawn, but it did not go to the extent represented. With regard to ovariotomy cases, the General Hospitals were not furnished with the appliances and conveniences for them, and no one objected to there being Special Hospitals provided. With respect to the figures about lithotomy, Dr. Richardson had overlooked the astounding fact that lithotrity had, during the very few years referred to, come into vogue in London Hospitals, and he had taken the pick of the cases,—the very worst cases, as distinguished from the more ordinary cases of stone-crushing. Upon the subject of the size of wards in the General Hospitals, to which Dr. Richardson objected, he did not think it necessary to build Special Hospitals in order to get small wards. Small wards could be had in the General Hospitals if required. To come to the question before them, there was no doubt that Special Hospitals were required for certain forms of disease. He was sure none of them questioned the desirableness of Special Hospitals, but the question was, How far should they be extended? That was the object of his resolution. He submitted that Dr. Richardson's proposition was no amendment upon his resolution.

The Chairman: The proposition of Mr. Henry Thompson, as altered, is as follows:—

"That the establishment of Special Hospitals for the reception of cases which are at present treated with unremitting care and interest in the existing General Hospitals, for which ample provision is there made, and which are not personally dangerous to others, is not only unnecessary, but very prejudicial to the interests of the patients, of the Profession, and the public."

To that an amendment has been proposed by Dr. Richardson:—

"That a liberal scheme in the organisation of General Hospitals is a primary consideration in Hospital Reform; while the system of Special Hospitals is a secondary consideration, and often the result of necessity."

Mr. Thompson: I do not see that that is an amendment. I can vote for that. I call upon you to put my resolution.

Dr. Richardson: I make it an amendment.

The Chairman was about to put the amendment.

Mr. Thompson: You decide that it is an amendment?

The Chairman: I decide it to be an amendment to your proposition.

The amendment was then put, when there appeared seven for it, and none against it; Mr. Thompson and other gentlemen declining to vote.

Mr. Thompson: I would vote for it if it were put as a resolution.

The Chairman: The amendment is carried.

Mr. Thompson: You will put my resolution?

Dr. Richardson: The amendment is carried, and you will now please to put it as a substantive resolution.

The Chairman then put the amendment as a substantive resolution, and there were again seven hands held up for it, and none against it.

The proceedings then terminated.

EXAMINATION PAPERS OF THE RADCLIFFE TRAVELLING FELLOWSHIP.

OXFORD, 1860.

No. I.

1. Describe the several objects visible at the base of the human brain, as displayed in the dissected preparations put before you.

2. What influence do variations in food and temperature exercise upon the exhalation of carbonic acid?

3. What are the different views entertained as to the sugar-making function of the liver? and what process would you adopt in investigating the question for yourself?

4. State briefly the connexions and functions of the corpora olivaris and other accessory ganglia in the medulla oblongata.

5. What are the results of paralysis, and what of excitation of the cervical sympathetics?

6. Give the minute anatomy of the human placenta.

No. II.

1. Place under the microscope a slide with nerve cells from the animal laid before you; and enumerate the several varieties of ganglionic cells which are met with in nerve centres.

2. Give a history of the development of the blood corpuscles in the early embryo and subsequently. State the quantitative relations which the blood cells hold to the entire volume of the blood and to its solid residue, and contrast the chemical character of the contents of the blood cells with that of the substances contained in the liquor sanguinis.

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3. State the mutual relations of bone cells, marrow cells, and cartilage cells.

4. Give an account of the deep origin of the fifth pair of cerebral nerves, and enumerate the different communications into which it enters with other nerves at its origin and at its periphery.

5. What are the functions and structure of the tonsils and of the glands which make up Peyer's patches?

6. Give the history of the Wolffian bodies and their ducts. What structures in the adult are remnants of these embryonic organs?

No. III.

1. Describe the urinary deposits under the microscope, and the diathesis with which it is connected. Make a tabular classification of urinary deposits, with a brief view of the mode of discriminating them.

2. Give your views of the pathology of asthma.

3. State as fully as you can what are the products of inflammation in general.

4. Are there any microscopical structures certainly diagnostic of the maligant tumours?

5. Describe the specimen of diseased lung exhibited on the table.

6. "The operation of all causes of sudden or violent death may be referred ultimately to two modes of injury, which are in some cases perfectly distinct, although in others they are evidently blended."

Explain and illustrate this.

No. IV.

1. What are the reasons for the administration of mercury in syphilis?

2. Give the rules which would guide your judgment in the employment of wine or blood-letting in pneumonia.

3. Describe the pathological consequences of severe idiopathic pericarditis, running on through a slow course to death; and say when and how art can interfere to defer the fatal termination.

4. How do you distinguish between the real and spurious hydrocephalus in children? How do you treat each respectively when satisfied of its existence?

5. What great improvements have taken place of late years in the management of the insane?

6. Bread, 1 lb.; beef or mutton, 8 oz.; potatoes or greens, 8 oz.; herbs for broth, 25 drms.; barley, 14 drms.; salt, 8 drms.; vinegar, 16 drms.; tea, 4 drms.; sugar, 16 drms.; milk for tea, ½ pt.; broth, 1 pt.: beer, small, 1½ pt., or strong, 1 pt.

The above dietary is furnished to certain persons in Her Majesty's Service. Say for whom it is fit, and for whom unfit. Make any statements that occur to you on the amount of nitrogenous and non-nitrogenous aliments proper for able-bodied persons in full work.

7. What is the maximum known rain-fall in a year? What the minimum? Where do either occur? How do you observe the hygrometric conditions of the atmosphere?

8. Does geological formation influence local climate in a sanitary point of view? Give any local knowledge you may have to illustrate this point.

No. V.

1. Ascertain the nature of the chemical substances, *a*, *b*, *c*, *d*.

2. What are the three acids present in this solution?

3. Examine this solution for grape-sugar, uric acid, and albumen.

No. VI.

1. Give a brief account of the different classes of reactions in which hydrogen gas is evolved, expressing the decomposition in each case by an equation.

2. What are the atomic weights of oxalic, formic, and hydrocyanic acids? Give reasons for the weights which you assign.

3. What metallic sulphides are soluble in sulphide of ammonium? What is the nature of the substances formed in this solution? With what analogous bodies are you acquainted?

4. How should you determine the quantity of the elements present in a mixture of chloride of sodium and iodide of potassium?

5. What chemical changes are known to be effected by the pancreatic juice?

6. By what processes may glycol be prepared? What is the theoretical interest which is attached to this body?

7. Explain the reaction in which anhydrous acetic acid is formed. What view do you take as to its constitution?

REVIEWS.

A System of Surgery, Theoretical and Practical, in Treatises by Various Authors. Edited by T. Holmes, M.A. Cantab., Assistant-Surgeon to the Hospital for Sick Children. In Four Volumes. Vol. I. General Pathology. Pp. 825 London: 1860.

SECOND NOTICE.

The next Essay is that on "Pyæmia," by Mr. G. W. Callender. He discriminates between what he calls septic infection,—such as follows the inoculation of decaying animal matter, under which he includes most of the spreading unhealthy suppurations of the phlegmonous erysipelas type,—and pyæmia proper, under which latter term he includes local secondary suppurations, either accompanying the systemic infection from putrid persons, or arising primarily after injuries. He appears to think the entrance of decomposing fibrine into the circulation, the most probable condition giving rise to the latter class of cases. This Essay contains a considerable body of facts, well arranged, and may be read with interest by anyone who has the courage to master the perplexing language and ill-marked definitions of the first page or two. The treatment is decidedly meagre, and devoid of the element of hope.

The Essay on "Tetanus," by Mr. Alfred Poland, is a *replica* of a paper which has gained considerable credit for its comprehensiveness and brevity and abundance of collected facts. It presents a remarkable contrast to some others in the volume in these respects.

"Delirium Tremens" falls to the lot of Dr. Barclay, who in a dozen pages presents us with an elaborate but thoroughly readable account of this disease. He discriminates the various conditions which may be associated with it, and gives directions which will be of infinite service to the Practitioner who thinks only of laudanum and unlimited brandy.

The Essay on "Scrofula" is contributed by Mr. W. Scovell Savory. It is readable, but contains nothing original, and is not very strong. The same may be said of "Hysteria," which follows. It has no positive faults, but is not very full, and shows nothing original in the facts or their handling.

Mr. Henry Lee's Essay on "Syphilis" begins with a pretty clear account of the questions lately discussed concerning the value of inoculation, the contagiousness of secondary symptoms, and the alleged curative virtues of syphilisation. The view which Mr, Lee gives of the results of inoculation, and of the conditions under which it succeeds, may be thus summed up:—

The primary syphilitic disease *par excellence*, that which alone is associated with constitutional infection, is the Hunterian, or indurated chancre; the essence of which, according to Mr. Lee, is a "specific adhesive inflammation" in the tissues of the part affected; and by no means of necessity an ulcer. (Be it observed in passing, that Mr. Lee, by his adherence to the antiquated Hunterian phraseology, exhibits singular confusion in his use of the word "ulceration." For whilst describing what all the world calls "ulceration" as a liquefactive process, a "molecular necrosis," which it really is, he yet, to the astonishment and confusion of his readers, presents us with the term "ulceration," or "ulcerative inflammation," as the work of "the absorbents"! He also reproduces, with entire faith, the Hunterian dogma, "that no two actions can take place at the same part, nor in the same constitution, at one and the same time;" a dogma contradicted by common experience and by half-a-dozen palpable facts, which he records in his essay.) But to proceed,—The essential primary disease is an abruptly circumscribed and circular indurated spot. It *may* ulcerate by more or less liquefaction of its surface, and may spread, but always circularly. It does not secrete pus; but only serum and epithelial *debris*, and may have no secretion at all. Its period of incubation, or existence as an unnoticed pimple, may be some weeks, especially if it follow contagion from a *secondary*

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syphilitic affection. If cut out, the cut surface assumes the diseased character. It may be attended with bubo, which is commonly indolent and non-suppurating.

Now this chancre cannot, according to Mr. Lee, be propagated by inoculation upon the skin of the same patient, just as a vaccinated child cannot take vaccination again. Yet there are exceptions which prove the rule. For a sore of this sort may be inoculated upon the same patient if the operation be done *at once*, before the specific induration have taken place, and the syphilitic blood taint, of which it is the sign. Again, if you irritate the chancre and make it suppurate, you may produce some slight sort of sore by inoculation in the same individual; but not the true indurated sore. Inoculation, therefore, is worthless as a test of the true chancre.

Of secondary syphilis, Mr. Lee fully believes the contagiousness.

With regard to the value of syphilization as a curative process, the sum of his observations is simple. The soft suppurating sore is easily inoculable on the same patient over and over again to a certain period. But it is not a as rule followed by secondary symptoms. Therefore inoculation guards against a contingency that is not likely to happen if the original sore be of the suppurating kind; and it is no protection against the constitutional results of the indurated chancre, even supposing it possible to inoculate, which Mr. Lee says it is not.

Altogether Mr. Lee's account of this intricate subject is interesting and clear. The latter epithet cannot be applied to his classification of the varieties of syphilis. Having clearly described the true infecting or indurated sore, he gives three other varieties of local syphilis; the "suppurating sore," in which the inoculated part is affected with "suppurative inflammation;" next, the "ulcerative syphilitic inflammation," which, to our astonishment, signifies suppurating bubo, and "destructive syphilitic inflammation," of which there are two varieties, sloughing and phagedæna. In perusing the whole account of these varieties of local syphilis, we are constantly in doubt whether the writer means to assert so many different diseases, or the same disease, with so many local complications. It would be very difficult to extract any clear idea of Mr. Lee's *differentia* between his suppurative, ulcerative, and phagedænic varieties. We rather suspect that by an extension of his logic, we might divide horses into —horses, horses with gigs, and piebalds.

We must not omit to say, however, that whoever will "get up" Mr. Lee's paper (and the writer must not be blamed for the intricacies of his subject), will acquire clear views of the conditions under which caustic is justifiable, and under which mercury should be used; and will thoroughly respect the great labour which the writer has expended in forming his own opinions. We notice that he abstains from any opinion as to the plurality or unity of syphilitic poisons, although he leads his readers to infer that the difference in syphilitic ulcers lies in the reaction of the individual constitutions to which the poison is applied.

Mr. Paget follows with a compendious account of the varieties of "Innocent Tumours," identical for the most part with that given in his celebrated Lectures. His labours in this field have been accepted by the Profession; and the reader will stand in no need of our criticism. Yet we cannot help thinking that materials are surely now accumulated which warrant a new treatment of the whole subject. The characters of "innocency" are very ill borne out by some members of the group, and the establishment of "recurrent," *i.e.*, "malignant" innocent tumours as a class, provokes a smile.

Cancer follows, by Mr. Charles H. Moore; he gives us what most persons know already, with a few practical facts derived from his own observation. He says, by-the-bye, that the limits of his Essay do not admit of a lengthened description of microscopic appearances; and refers for these "to more lengthy works upon Pathology and Histology." It fills us with dismay—to be told of the "limits" of four volumes of 800 pages each! We doubt if his account of epithelial cancer is drawn from the life, when he says that, "the entire substance of all these growths is microscopic cells, which present the flattened form," etc., and he ignores all the reasonable doubts generally held, of its true alliance with cancer. There are some excellent papers on the so-called cancerous degeneration of warts and ulcers in a late number of the *Dublin Quarterly*, by Dr. Collis, which might lead Mr. Moore to modify his opinions on this point. In the treatment, Mr. Moore makes a curiously slight and short allusion to Dr. Fell. Considering the sanction which the Middlesex Hospital authorities gave to this American's treatment, it would have been but fair now in Mr. Moore to tell us frankly their present estimate of it.

After a very full and elaborate account of "Contusions," "Wounds," and "Cicatrices," by Mr. Paget, of which we can only say that it corresponds with his other contributions, we have an essay on "Animal Poisons," by Mr. Poland,—very good so far as it goes, but we find the same details and arrangement, and almost the same words in other well-known works, so that we seem to know it all as we read it. Surely, hackneyed as a subject may be, an energetic writer may cite fresh authorities, if he has no fresh cases or theories. The treatment of snakebites is given with singular indecision. Why did he not quote Mr. Buckland's treatment of his own case? There was no vacillation in that.

The article on "Hæmorrhage," by Mr. Moore, including injuries of blood-vessels, the hæmorrhagic diathesis, transfusion, the entrance of air into veins, etc., deserves commendation. It is very complete, easily read, and altogether practically useful. But he omits all mention of *Hospital air* as a cause of recurring hæmorrhage.

Next follows "Collapse," by Mr. W. S. Savory, which might have been abridged with very great benefit.

Then comes a contribution on Burns and Scalds, and Injuries from Lightning, from the pen of Mr. Timothy Holmes, the Editor; and it gives us a very favourable impression of his style and powers. The article is particularly rich in its account of the pathological changes found in those who have died from burns, at various stages of their progress.

The concluding Essays are those on the General Pathology and Treatment of Fractures, of Mr. T. K. Hornidge, and on the General Pathology of Dislocations, by the Editor. Both are good articles; Mr. Hornidge's one of the best in the book. For example, his account of the various remedies for ununited fracture, is as good as it can be.

Thus we have concluded a very careful perusal and judgment of the value of the First Volume. The Essays of which it consists are curiously diverse in style, in literary ability, and logical power, and in the completeness with which they present their respective subjects. Some copious and well arranged, in which any student practised in reading will readily find what he wants; others thin, confused, and vacuous. We verily believe that the whole work would have been more useful, and more enticing, so to say, to the reader, had many of the articles been greatly compressed. Yet we must remember that the first part of any work, if it treats of general and abstract subjects, is liable to appear heavier and more diffuse than the later and more practical parts. The want of engravings, which are most rarely introduced, is, we think, a mistake. We do not want a picture-book; but certainly if the microscopical characters of tumours are worth describing, they are worth delineating.

How to Work with the Microscope: a Course of Lectures on the Practical Use of the Instrument, and Microscopical Manipulation. By Lionel S. Beale, M.B. F.R.S., Fellow of the Royal College of Physicians, etc. etc. Illustrated Edition, with 32 Plates, containing upwards of 150 Figures. Pp. 124. London: 1861.

This is not a new edition; that is to say, a work reprinted after having been written afresh, or revised, and having new matter incorporated with it, after the common manner of a new edition, but is the old book of 1857, with thirty-two pages of cuts introduced, and with new preface and table of contents.

Practical Observations on the Diseases of the Joints involving Anchylosis, and on the Treatment for the Restoration of Motion. By Bernard E. Brodhurst, F.R C.S., etc. etc. Third Edition. Pp. 120. London: 1861.

Mr. Brodhurst's plan of treatment, for various kinds of immobility of joints, has now been before the Profession for some time, and the appearance of a new edition of these "Practical Observations," shows that the interest of the subject is kept up, and the success of the remedial measures unabated.

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PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

ON IRIDECTOMY IN GLAUCOMA.

By Dr. QUAGLINO.

THE following are Dr. Quaglino's conclusions with respect to this operation, the results of abundant clinical observation: 1. Iridectomy may restore or improve vision even in cases in which the glaucoma is chronic, and more or less complete amaurosis has existed for a longer or shorter time, and signs of congestion of the external membranes are absent. 2. It is indicated in chronic glaucoma, when ophthalmoscopic inspection shows that the papilla and its vessels are not in an advanced state of atrophy. The failures of the operation in old glaucoma have depended upon this advanced condition of atrophy of the anterior extremity of the optic nerve and its central vessels. 3. In the majority of cases the neuralgia which accompanies the glaucomatous affection disappears after iridectomy. 4. The phenomena of excavation of the papilla, its greenish coloration, and pulsatile action of the vessels, indicated by authors as characteristic of glaucoma, may be wanting, while those derived from the exiguity of the arteries and veins of the retina, especially in the papillary area, and the shortness of their course, are more constant. 5. This change in the papillary vessels, which in old glaucoma terminates in atrophy, must be regarded as the effect of the pressure of the humours which have become increased in quantity, or as the consequence of the strangulation produced around the optic nerve by the engorged or hypertrophied choroid. 6. Iridectomy, therefore, cures glaucoma by evacuating the humours, taking off compression by diminishing the mass of tissues within the eyeball, and disgorging the choroidal vessels. A proof that this is the case is found in the fact that after the operation the nutrition of the vessels becomes augmented, and the hardness characteristic of the glaucomatous eye ceases. 7. The success of iridectomy, independently of other circumstances, is directly proportionate to the amount of inflammatory action which succeeds to the operation, and to the size of the portion of the iris removed. 8. After the operation, the anterior chamber being for the most part abolished, and the convexity of the ball diminished, sensible advantage is usually derived from the employment of presbyopic glasses of an intermediate number.—*Omodei's Annali*, vol. clxxiii. p. 620.

ON THE TREATMENT OF THE OMENTUM, AND THE EXHIBITION OF OPIUM AFTER THE OPERATION FOR HERNIA.

By M. DEMARQUAY.

M. Demarquay observes that, from the commencement of his career, he had always doubted the propriety of reducing the omentum after the operation for strangulated hernia, even when in a healthy state; and subsequent researches have convinced him that it is bad practice to do so. When this reduction had been made, it frequently happened that the patient was seized with peritonitis, either general or limited to the vicinity of the reduced hernia. At the autopsy a violent inflammation of the omentum was discovered, and especially of the reduced portion. On several occasions abscesses were found in the centre of the omental mass; and at all events pus was always met with between the reduced omentum and the portion of intestines upon which it lay. For these reasons, M. Demarquay is always in the habit of excising the omentum. Moreover, this vascular organ has been submitted to constriction as well as the intestine, and has consequently become tumefied and gorged with blood; and while in the hernial sac it has remained in contact with irritating secretions or exhalations having a penetrating, fetid odour. The omentum imbibing these matters like a sponge, carries with it, when reduced, a cause of peritonitis. To this we have to add the exposure of the part to the air, and the manipulation it has to undergo to secure its reduction. M. Demarquay has found this practice of excision very successful, and unattended by danger; and he considers it as far preferable to leaving the omentum to separate by sloughing, a process which gives rise to exhaustive suppuration and delayed cicatrisation, while it does not contribute, as it has been supposed to do, to the obturation of the hernial ring.

After the resection, the question of after-treatment has to be considered, and for several years M. Demarquay, in imitation of the practice of most of the Paris Surgeons, was in the habit of securing by purgatives a discharge of gaseous and fæcal matters from the bowels. Six years since he had the opportunity of observing the success which attended M. Monod's practice, which consists in abstaining from the use of purgatives, and administering fractionary doses of opium. One grain and a-half of opium are divided into ten pills, and one of these is given every hour during twenty-four or forty-eight hours. If, during this time, the bowels have not acted, a saline purge will usually act satisfactorily. The results are really remarkable, and are due to the relief of pain, to the arrest of attempts at vomiting, due to the strangulation, and to antiperistaltic movements (which continue after the strangulation has been removed), to the production of sleep and a gentle transpiration, and to the expulsion of the intestinal gases. Since his adoption of this practice M. Demarquay finds the results of his hernia operations are far more favourable than when he was in the habit of promptly administering purgatives.—*Bulletin de Therapeutique*, tome lix. pp. 295.

EXCERPTA MINORA.

Rapid Union of Fracture in an Aged Person.—Dr. Meachem relates the case of a woman, aged 90, who fractured both bones of the left leg at the beginning of the lower third by slipping on ice. The author found the leg bent at "right angles" at the seat of fracture, the patient being in much pain and suffering from shock. Some morphia was administered before reducing the fracture. A good, generous diet, a quarter of a grain of opium twice a-day, and as much whisky as she could drink were ordered. On the third day the limb was of a dark purple colour for two inches above and below the seat of fracture, and there were two large vesicles containing very dark serum over the most superficial part of the tibia: these were punctured. From this time nothing unfavourable occurred, and at the end of the twenty-eighth day she was able to bear the whole of her weight on the injured limb.—*American Medical Times*, 1861, No. 1.

New Form of Cataplasm in Phlegmon of the Fingers and Toes.—M. Dechange, a Belgian Military Surgeon, employs the following ingenious procedure:—The emollient or detersive substance which is to be applied is placed in a large bladder, previously softened by a little oil. Into this the hand or foot is then introduced, the orifice of the bladder being fixed around the wrist or above the ankle by a turn of a bandage, interposing at these points also a little wadding or lint. Evaporation being thus impeded, the cataplasm retains its fluidity for several days, and it may be warmed at will by immersing the bladder in tepid water. The fingers or toes are relieved from all pressure from their own contact, and move freely in the poultice, the beneficial effects of which is thus directed over their entire surface. The economy of the procedure, by saving of rags, is also a recommendation in Hospital practice.—*Presse Belge*, 1861, No. 5.

Purpura Rheumatica.—This form of purpura (also termed *peliosis*, *roseola rheumatica*, and *rheumatokelis*) is that which is most frequently met with in Professor Hebra's wards, occurring in persons who are otherwise in good health, and especially in those whose occupations compel them to be a good deal on the feet, as bakers, smiths, tapsters, and washerwomen. Severe tearing pains are felt in the different joints, and especially the knee, and are followed in a few days by the appearance of red spots of various sizes, which do not disappear on pressure with the finger. They are found on the thigh and legs, but rarely on the trunk. They, as well as the pains, disappear in five or six days if the patient keeps quiet in bed. They return, however, if he leaves his bed, and this form of purpura may in this way relapse five or six times, and last for months. It will, however, soon pass off again if the bed be kept for a few days. Eventually the disease disappears of itself.—*Wien Spital's Zeitung*, 1860, No. 5.

Treatment of Lupus.—For the treatment of *lupus vulgaris* Professor Hebra prefers the solid nitrate of silver, as being the caustic, the amount of action of which can be best determined, and the one which gives rise to the best cicatrices. Still its application is very painful, and has to be often repeated. The chief rule is not to apply it too

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sparingly, taking care to destroy all the diseased tissue until an even, clean surface is produced. Two effectual cauterisations in a week suffice. The concentrated acids and other caustics are objectionable. *Iodo-glycerin* (pure iodine, hyd. potass, glycerine equal parts) is also a good caustic, and especially tends to produce a smooth even cicatrix. From two to four spoonfuls of cod-liver oil should be also given internally, as this proves a powerful adjuvatory. In several cases it will cure the disease without any local treatment at all, but it requires to be given for a long period to accomplish this end. The best means of treating the *lupus erythematodes* of Cazenave is by the application of the *iodo-glycerin*, which, however, causes great pain, and has to be long continued; cauterising with caustic potass dissolved in equal parts of water, or with muriatic and nitric acids, acts more rapidly and less painfully, but leaves far more unsightly cicatrices.—*Wien Spital's Zeitung*, 1860, No. 6.

GENERAL CORRESPONDENCE.

RADICAL CURE OF HERNIA.

LETTER BY MR. A. G. FIELD.

[To the Editor of the Medical Times and Gazette.]

SIR,—In my communication on this subject of January 12, the only alteration I proposed on Mr. Wood's method was removing, in the readiest manner, a portion of the skin of the scrotum before proceeding to the other steps of the operation, in which Mr. Wood's suggestions were accurately followed.

Mr. Henry Thompson, in your last impression, gives the date (November 7, 1860) when he commenced an operation for the radical cure of hernia in the manner I proposed. I am quite sure Mr. Thompson will not accuse me of plagiarism, and to prevent anyone else from doing so I subjoin an extract from my case-book:—

"March 17, 1860.—In the operating-room of St. Mary's Hospital the boy was put under the influence of chloroform by Mr. Nourse, and, with the assistance of Dr. Allen, Messrs. Ross, Martin, Wilton, and Brown, I performed Wood's operation, with one modification, viz.—after detaching the skin from the superficial fascia I cut away the skin so detached, leaving a circular space denuded of skin about as large as a five-shilling-piece. This was done because it enabled me to see at once that the skin was not attached to the fascia by any bands which might have accidentally escaped the knife during the subcutaneous separation, because I could more easily introduce my finger into the inguinal canal than if a small opening only were made in the skin, and lastly, because the scrotum being so much enlarged by the pressure of the hernia, the removal of a portion of it would reduce the part more nearly to its natural size. Another advantage of this plan is that there is less surface to heal.

"On previous occasions when performing Wood's operation I had experienced some difficulty, owing to the skin tightly grasping the top of my finger when it was passed up into the inguinal canal, whereby the necessary delicacy in the sense of touch was interfered with, and an obstacle presented to the introduction of the needle."

I quite agree with Mr. Spencer Wells that there is a small class of cases to which Wutzer's operation is applicable. I have myself adopted it since commencing to operate according to Wood's method, and as one case in which I did so is interesting I will give it at length:—

"*Double Inguinal Hernia—Operations by Wood's and Wutzer's Methods.*

"W. B., aged 30, a strong, healthy man, gained his living as a smith's labourer, technically called a striker, much used to lifting great weights and striking with a heavy hammer. For the last six years had been ruptured, and suffered so much inconvenience that half his time was lost, owing to his not being able to work. Having heard of a case which had been cured by operation, he consulted me as to the propriety of submitting himself to the ordeal. On examining him, I found a bubonocele on the left side, which had appeared about four months before, and was increasing gradually, while on the right side he had an enormous scrotal hernia; a large ring and short inguinal canal. This hernia began to descend six years ago, and for the last two years he had not been able to keep it up by any kind of truss.

"Time was important to this patient, as he had a family to maintain. I therefore determined on attempting to cure both herniæ at the same time.

"February 13, 1860.—While he was under the influence of chloroform, I did the operation on the side of the largest hernia, in the manner recommended by Mr. Wood, and applied Wutzer's instrument to the left side, where the smaller hernia existed. A few teaspoonsful of blood were lost in the first operation.

"14th.—I was called to him at 3 a.m. He had vomited two or three times, and fancied something had given way at the seat of the first operation, and a little bleeding occurred, which, however, stopped spontaneously. He complained of some pain, but this was principally about the navel. Weak brandy-and-water and beef-tea were given to him.

"15th and 16th.—He continued to do well, taking a fair quantity of food, and complaining only of a little soreness and no abdominal pain. His bowels acted naturally.

"18th.—The suture was removed from the right side; it had caused but little irritation, and only a small quantity of discharge followed its removal. There was no abdominal tenderness, and no disturbance of the general health. A linen compress was applied over the inguinal canal and secured by a bandage. No pain on the other side.

"19th.—Suffered considerable pain on the left side, which was red, swollen, and tender. Wutzer's apparatus was removed, a drop or two of pus escaping on withdrawal of the needle. Tongue slightly coated, and pulse rather weak and rapid.

"20th.—Much better; no suppuration, but a small slough at the point of exit of the needle. The plug of scrotum kept well up; the testicles were supported, and light dressings applied to the wounds. Stated that he felt both sides much firmer. There was no protrusion when he coughed. He said that he had suffered far less pain on the side on which Wood's operation was done than on the other.

"26th.—Right side all but healed; lower wound quite healed. No pain; health good. No protrusion on either side on hard coughing.

"At the end of a fortnight he got up, wearing only a light bandage.

"March 3.—He felt a little swelling on the left side; he was therefore provided with a weak truss.

"24th.—Has been to work at his old trade, which, to his great delight, he finds himself equal to, and it has not caused any recurrence of the hernia."

Up to the present time he has not lost a single day's work on account of his former defect, the ruptures having remained quite well. He continues to wear the truss, less from necessity than because it affords an agreeable support, but sometimes he puts it aside and walks a considerable distance without any bad consequences resulting.

I am, &c.

A. G. FIELD, F.R.C.S.

28, Old Steine, Brighton, January 21.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JANUARY 22, 1861.

MR. SKEY, F.R.S., President, in the Chair.

A paper, by Dr. CHRISTIAN, was read on the

RESTORATION OF SUSPENDED ANIMATION IN PERSONS APPARENTLY DROWNED.

Two Societies, the Royal Humane Society and the National Life-boat Institution, issue instructions, which are widely circulated, as to the best mode of restoring suspended animation in persons apparently drowned. These rules differ not only in detail, but in principle. 1st. As to the mode of performing artificial respiration. 2nd. As to the propriety of using the

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warm bath. On each of these matters the author stated his desire to elicit an expression of opinion from the Fellows of the Society, after laying before them some considerable experience acquired during twelve years as Medical Officer to the Royal Humane Society in Hyde-park. The number of cases of submersion for twelve years was 443. Of these, 181 were rescued and recovered without treatment; 165 were brought to and recovered by treatment at the Receiving-house; and 97 were brought dead or the treatment was unsuccessful. The number of cases of submersion for the last four years was 140. Of these 68 were rescued and recovered without treatment; 38 were brought to Receiving-house and recovered; and 34 were brought dead or were not restored. 15 of these cases were treated by the Marshall Hall Method, and 3 recoveries followed: the rest were treated by the rules mentioned below. As to the mode of performing artificial respiration, the method recommended by the Life-boat Institution is what Dr. Marshall Hall called his "Ready Method," while that now used by the Royal Humane Society is the method of Dr. Silvester. On Dr. Marshall Hall bringing his method under the notice of the Royal Humane Society, the committee adopted means immediately to give it a fair trial. Copies of his instructions were sent to all their Medical Officers, numbering 120, and the boats of the Society on the Serpentine had a platform made to each, on which to manipulate directly the body was taken from the water, and the boatmen were instructed and practised in the performance of the operations as he directs. After giving the method a full trial in about fifteen cases, the very intelligent superintendent, the boatmen, and the author became so satisfied of its inefficiency to restore animation, and of the difficulty of properly carrying out the manipulations, that he felt himself justified in representing those facts to the committee, and in adopting the plan recommended by Dr. Silvester, which he believed in every way to be superior, more manageable, less likely to injure the patient, will fill the chest with and expel air from it more fully, and will not force the contents of the stomach upwards, and in the way of respiration. The following are the directions for treating the asphyxiated at the Receiving-house, Hyde-park:—"Wipe the mouth and nostrils directly the body is taken from the water. Use Dr. Silvester's method; at the same time let the body be taken as quickly as possible, to the Receiving-house, and place it in the bath up to the neck. Raise the body in 20 seconds from the water, and dash cold water against the chest. Pass ammonia under the nose. Use again Dr. Silvester's method, and the inflating apparatus if it fail. Remove the body from the bath, and rub the surface with dry hot towels, perseveringly continuing the other treatment." After many experiments the author had come to the conclusion, that inflation of the lungs by Dr. Silvester's method, or by the Society's apparatus, is the first remedy, and the shock of the warm bath the second; that, after eight minutes' complete submersion, recovery is hopeless, and that, when ten minutes elapse after being taken from the water without any effort at respiration, it is equally so. On the subject of the warm bath, which has excited so much discussion as a remedy, he remarked, that it must be understood that it is used as an immediate and powerful excitant; and it had so frequently happened (twice while he was actually present) that a person brought in as asphyxiated, who to the bystanders was apparently quite dead, immediately on being placed in the bath gave the sob or gasp which is the precursor of respiration, that it might be boldly stated to be a most valuable adjunct to treatment, and, properly managed, in no way pernicious. He concluded by citing a letter from Sir Benjamin Brodie to the Royal Humane Society, confirming the preceding conclusions.

Dr. Sharpey having had the honour of presenting the paper to the Society could not let it pass without remark. His object was, however, rather to elicit opinions on the questions brought forward, than to decide on the relative merits of the two methods, as he had no practical experience of either. Dr. Christian had brought the subject forward in order that both methods might be well considered, as they were both still *sub judice*. He would observe with reference to the method of Dr. Marshall Hall that he had on one occasion spoken favourably of it, but after more mature consideration and after hearing the practical experience of the officers of the Royal Humane Society, he had found reason to alter his opinion. Dr. Sharpey considered that Dr. Marshall Hall's method could only claim one advantage; and it was not clear that it had even that. The supposed advantage being that the tongue falls forward and thus does not embarrass respiration. He thought that Dr. Silvester's method attained this object without any of the disadvantages of the "ready method." The disadvantages of the "ready method" were several. It must be remembered that a body which has been some time submerged is an insensible and inert body, and serious mischief has not unfrequently arisen from rough handling. Again, the constant turning of the body, renders it very difficult to apply warmth, or carry out the other auxiliary means systematically, but the greatest objection is, that it does not even fulfil its professed object, viz. that of changing the air in the lungs. Dr. Marshall Hall had cited experiments in support of his views; but the want of precision in making them was very apparent from his description. He (Dr. Sharpey) could not attach any importance to the results of experiments so loosely conducted. Dr. Silvester had repeated them with greater care, and did not succeed in getting a displacement of more than a cubic inch of air. It would be said, however, What answer should be made to the many statements of the success of the ready method? He would reply that the subjects of many of these cases were still-born infants, and probably would have recovered without any assistance if left to themselves. Then, again, there is no air to be displaced in the lungs of infants. In reference to adults, he (Dr. Sharpey) believed himself right in saying that in many of the cases of recovery after submersion, respiration commences spontaneously soon after the patient reaches the air. If in such cases Dr. Marshall Hall's method were begun at once it would be unfair to give the credit solely to it. May it not even be, as suggested by Sir Benjamin Brodie, that recovery often follows, not from the means, and but in spite of them? Dr. Sharpey considered that there were just grounds for reviving the old method of insufflation, which was, he thought, given up without sufficient reason. The objection to this plan was that it produced emphysema; but then, as he knew by experiment, this was from forcing in air too quickly and in too great quantity. Dr. Sharpey then alluded to the various instruments which might be used in insufflation. In reply to the objection that often insufflation could not be practised from the want of instruments, etc., he would remark that there could be no reason why the insufflation should not be carried on with the mouth, through a pipe put into one nostril of the patient. A card, or letter-envelope, might be made into a pipe till better was got. The force and pressure used would be no more than that sustained by the operator's own lung. He believed that emphysema in reference to these cases was a bugbear. Dr. Christian had observed that in unsuccessful cases in which insufflation had been practised, no emphysema was found at the autopsy; and a friend had told him (Dr. Sharpey) that he had never found emphysema in the lungs of still-born children who had been unsuccessfully treated by insufflation at the Edinburgh Royal Maternity Charity. The objection that the air would be deficient in oxygen was not practically valid, as the operator might, by several deep inspirations, quite change the air in his lungs, and then, by employing his chest for insufflation quickly after an inspiration, he would not leave time for any considerable change in it. There was an outcry against the warm-bath, founded on mere speculation. The Royal Humane Society's officers had found it to be very efficacious. Edwards and Dr. Brown-Séquard made their experiments on puppies and kittens, and their experiments were not, he believed, to be fairly compared with the use of the warm-bath in cases of suspended animation.

Dr. Sibson had recently been engaged in prosecuting experiments on the restoration of suspended animation by the "ready method." They were only eight in number, and were not yet complete. In only one of them did the "ready method" appear to answer. The experiments were not complete, and he did not therefore speak decidedly from them. So far, however, they did not bear out Dr. Marshall Hall's plan. There was very little change produced in respiration, but more than one cubic inch—generally two or three. Dr. Sibson believed that emphysema did occasionally happen, and alluded to three cases of restoration of suspended animation, in one of which it had occurred. He then alluded to a case in which dislocation and fracture between the fourth and sixth cervical vertebræ had been produced by, he believed, zealously, but too roughly, carrying out Marshall Hall's method. The result of the injury was complete paralysis below the seat of injury.

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Mr. Spencer Wells believed that insufflation from the mouth was the best method, and that it was best accomplished by passing a tube through the nostril into the glottis.

The President remarked on the importance of the subject, which made it a matter of great regret that such a wide difference of opinion should still prevail.

Mr. Hulke knew of two cases in which emphysema had been produced by Dr. Marshall Hall's method.

Dr. Christian briefly replied.

A paper, by Mr. Thomas Paget, (of Leicester,) was read, on

AN OPERATION FOR PERVIOUS URACHUS.

The paper is on the removal of this fortunately rare but very distressing congenital defect by paring and adaptation, and illustrates the practicability of this by two instances, one of which is the case of an infant, four months old; the other the sequel of an adult, whose case was published in the 33rd volume of the Society's *Transactions*, and where a ring-shaped stone was formed upon a pubic hair, and extracted by the finger at the open urachus. In both the closure by the operation is complete, and the operation established.

OBITUARY.

MR. GEORGE JACKSON.

Our columns have recently recorded the death of Mr. George Jackson, at his residence in Church-street, Spitalfields. It would ill become a Journal professing to promote the scientific as well as the practical influence of the Medical Profession to allow this sad occurrence to pass without a word of special comment; and the omission would be less than justice to the Medical Practitioners of Great Britain—a class of men who not only exercise their humane functions with the greatest activity and conscientiousness, but exhibit among their ranks many successful students of the more theoretical branches of investigation. Such men have a double claim on public gratitude, for their departments of research bring little or no immediate personal gain to their possessor, and yet bear paramount influence over the cultivation of the community at large.

George Jackson was born in South Devon, and educated at Ashburton School. On leaving there he was articled to Mr. Gervis, a Medical man of the town, and soon afterwards entered as a Student at the as yet undivided Hospitals of St. Thomas's and Guy's. He took the diploma of Member of the College of Surgeons of London in 1813. Even before this period of his life he had begun to exhibit evidences of the mechanical ability which afterwards formed a prominent element in his character. But powers such as these naturally remained latent during student life, and during an unusually severe struggle against injustice and difficulty which marked his entrance into the active exercise of his calling as partner to an older Practitioner.

In 1828, however, he was enabled to show a tangible result of success in his favourite pursuits by obtaining the silver Isis Medal of the Society of Arts for an improvement in the hydrogen lamp. In this contrivance an incandescent mass of spongy platinum formed the most efficient substitute then known for flint, steel, and tinder-box, the only means by which our grandfathers could obtain fire, when phosphorus and chlorate of potass were all but undiscovered.

Mr. Jackson was an early lover of the microscope, and constructed one for himself at a time when it was little known to the Medical world. He employed the double powers of Woollaston, the least defective combination of lenses when the achromatic principle had not been applied to the microscopic object-glass. It is well known how, during the few years immediately following, the instrument received rapid and remarkable development as a means of scientific research. In all these advances Mr. Jackson was materially concerned: an expert practical mechanic, used to the lathe and vice, he was able to carry out his designs with his own hands; and no better testimony is needed of the goodness of his workmanship than the fact that the present form of the No. 1 microscope, supplied by Messrs. Smith and Beck, the eminent opticians, was modelled on his plans, and in part cast from his patterns.

He was one of the original members of the Microscopical Society in 1840, and there, at various times, exhibited the contrivances with which he enriched his favourite instrument. The first of these, a paper read on September 23, 1840, and printed in the Society's "Transactions," took up the subject of micrometric measurement, with which his name has since become so intimately connected. It was soon followed by another on his modification of the eye-piece micrometer. In 1852 he was elected President of the Society, and held office for two years. It would be difficult and tedious to trace every improvement which he contributed during many years to the mechanical branch of optics. Living in constant and friendly intercourse with the late Andrew Ross, with Mr. Lister, with Mr. John Quekett, with Mr. Warren De la Rue, and indeed with all the principal microscopists of England and the Continent, he had a share in every advance—though he was not of a character to claim credit for the authorship of any. Many, indeed, are awarded to him by the able writer of the "Treatise on the Microscope;" and the late Dr. Pereira acknowledges his micrometic assistance in his great work on Materia Medica.

In one department Mr. Jackson stood alone from first to last, namely, in the contrivance and fabrication of the ruled glass micrometer. This implement, which gives such authenticity to minute research, may be said almost to owe its existence to his labour. He constructed the elegant little ruling-engine with which nearly all the micrometers in use have since been manufactured. It is to be regretted that the machine, a gem of mechanical ingenuity, has never been figured or described; but the strongest proof of its perfection lies in the fact that it drove all others out of the field, so that till "Nobert's Lines" came to this country, hardly any minute scales were known than the slips of glass with diamond rulings now so familiar to all observers. For fifteen years Mr. Jackson supplied every optician of eminence with these instruments, and had lately made an ingenious adaptation of the principle to the transit telescope, and to the optical sights rendered necessary by the long range and accurate performance of our modern rifles.

In 1858 Mr. Jackson was elected one of the managers of the London Institution, and devoted much time to the concerns of that valuable scientific school.

It is remarkable that the memoir of a Medical man should proceed thus far without mention of his more strictly Professional relations; and yet in these he was beyond praise; a clear-headed, sensible Practitioner, he gained his patients' good will, not less by success than by kindness of heart. Many of his Medical brethren can testify to his sterling integrity of character, and to the nice sense of Professional honour which directed his behaviour. His high scientific attainments never led him away from the most precise performance of his specific functions, and to the last it was a favourite remark with him that "he was a Doctor by Profession, and a mechanic only for amusement."

It would verge on impertinence to intrude into his domestic life more than may be done in a few words. He married the daughter of Mr. Gervis, his first Professional instructor, and survived her many years. His three sons he brought up to the Profession of his own choice; one of them, Dr. George Jackson, now practises at Tottenham; a second, Mr. John Jackson, continues his father's practice; and the third, Dr. Frederick Jackson, is settled at Barnsley, in Yorkshire. His daughter is the wife of Mr. Warrington, the able analytical chemist, of Apothecaries' Hall. Mr. Jackson was in his sixty-ninth year at the time of his death. He was followed to the grave by many warm friends, and among them was the officiating minister at his funeral, sometime rector of his parish, the Rev. W. Stone, Canon and Treasurer of Canterbury Cathedral.

It is superfluous to employ space in the laudation of a man who, while alive, never courted notoriety. We sadly chronicle the loss of one, who honourably carried out the duties of a noble and scientific Profession, and who yet found time, after necessary work, to employ himself with distinction in the advancement of abstract knowledge. We make this mention the more readily, as we believe that among our fraternity are many such examples, and it is well that the public, somewhat variable in its estimate of the Medical character, should be taught the worth and practical value of men like this. Their truest epitaph is, that they have done their duty quietly, but with earnestness, and have been, to an eminent degree, useful in their generation.

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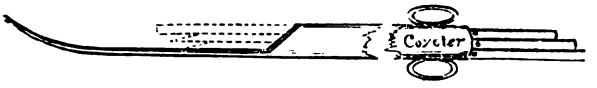
NEW INSTRUMENT.

AN INSTRUMENT FOR CUTTING, DILATING AND CAUTERIZING STRICTURE OF THE URETHRA.

It consists of a flat, metallic tube, seven inches long and a third or more of an inch broad, to one end of which there is



attached a grooved director of a size that will fill the channel of the stricture. Two or three long steel rods fitting this tube constitute the rest of the apparatus.

When it is used for incision, one of these rods ground for about an inch at the end into a cutting blade, is passed through the tube into the groove of the director, from which it is then pushed transversely and made to press upon and cut the stricture by one or both of the other rods. In cases of very narrow stricture, instead of a director, a cutting blade as small as is consistent with safety may be used, which is covered during the passage of the instrument by the blade of the steel rod in the manner of a pair of scissors.

Hæmorrhage, urinary infiltration and pyæmia are consequences of the internal incision of stricture as hitherto performed by instruments which cut as they move forwards or backwards in the canal, making wounds of uncertain depth and extent. The new instrument cuts by pressure alone; or, when it is necessary to add a little sawing motion, this will not endanger the sound and elastic urethra, especially when the knife is not very keen, as it is only as respects the resisting stricture that this motion is conjoined with the degree of pressure required to produce incision.

Solid dilators of transverse or excentric action have been used by M. Perrève and others, but their numerous defects have prevented their general adoption, notwithstanding the superiority of their principle to that of instruments acting as wedges. The objection to the dilator of fluid pressure is the difficulty of making and using it, although its great advantages should compensate for this difficulty. When the new instrument is used for dilatation, a blunt rod is substituted for the sharpened one; and as the dilatation advances, an inch of it near the point may form half a cylinder of considerable size, lying upon, instead of entering the groove. The advantages of direct or transverse dilatation, whether by a solid or fluid body, were first pointed out, and are fully explained, in Dr. Arnott's works on stricture and stone.

When the object is cauterization, a grooved wire covered with nitrate of silver or potassa, is substituted for the cutting or dilating rod.

Although the great majority of strictures can be kept at bay by the common modes of dilatation, there are many hard, irritable and elastic strictures which will not yield to these; and unless more efficient practices are resorted to, the patient is exposed to irreparable injury from the effect of continued irritation on the neighbouring organs. Unfortunately the more efficient practices hitherto employed are not unaccompanied with danger. Escharotics have fallen into disuse from the difficulty of confining their action; internal incision has the dangers already enumerated; and the perineal section, when restricted to cases in which other treatment is unavailable, has proved a very hazardous mode of procuring relief. The new instrument, by furnishing us with a better, and a very easily-manageable, means of dilating than the wedge, and a perfectly safe means of incision in cases not yielding to dilatation, supplies a great desideratum in this department of Surgery.

PURIFICATION OF GLYCERINE.—Glycerine by itself cannot be distilled; but, by means of a large excess of superheated steam blown into it, at a temperature of about 600° F., the operation may be readily performed, and a pure distillate obtained. At Price's Candle Company's Works, the separation of the fatty acids from the glycerine is effected by means of super-heated steam. At the temperature of 600° F., the fatty acids separate from the glycerine to unite with basic water, and the hydrated acids and glycerine distil over together, the acids floating on the glycerine solution. In this way, a pure distilled glycerine is at once obtained.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—At a Court of Examiners held on Wednesday, the 22nd, and Thursday, the 23rd ult., the following gentlemen passed the Anatomical and Physiological Examination, and, when eligible, will be admitted to the Pass Examination for the Membership of the College, viz.:—

Agassiz, A., Edinburgh
Allingham, J. H., St. Thomas's Hosp.
Andy, S. P., Madras
Antonini, Charles, King's College
Axford, W. H., King's College
Baddeley, W. B., Birmingham
Ballenden, J. H. M., Birmingham
Benson, J. S., Guy's Hospital
Blasson, E. J., Guy's Hospital
Bonney, F., Charing-cross Hospital
Bradbury, J., Manchester
Brereton, F. M., University College
Brown, A. G., Guy's Hospital
Buckmaster, C. A., King's College
Clarke, E. G., St. Barthol. Hosp.
Cocker, W. H., St. Barthol. Hosp.
Cocks, C. C., King's College
Colston, S. B., St. Thomas's Hosp.
Comerford, M. S. Galway
Cooper, W. H., York
Corbett, Thomas, St. Thomas's Hosp.
Cumming, S. McD., Birmingham
Douglass, G., Newcastle
Glover, W. J. S., St. Barthol. Hosp.
Greene, F. W., St. Thomas's Hosp.
Griffith, W. T., St. Barthol. Hosp.
Haswell, N. R., Birmingham
Hooper, R. W., Galway
Hursley, J., Middlesex Hospital
Hyde, Sidney, King's College
Jones, W., Birmingham
Kempe, C. P., University College
Lathbury, T. A., Birmingham
La Mert, L., University College
La Trobe, F. S., St. Thomas's Hosp.
Lawrence, F. G., London Hospital
Leyland, L. S., St. George's Hosp.
Lyons, William, Madras
Macaulay, F. E., Sheffield
Macpherson, R. S., Birmingham
Melladew, H. F. L., King's College
Michell, S., Bristol
Miskin, G. A., St. Thomas's Hosp.
Mitton, M. J., St. Barthol. Hosp.
Moore, H., Aberdeen
Moriarty, T. B., Cork
Morris, P., St. Mary's Hospital
Morris, B., Bristol
Morton, S. M., Bristol
Moss, Charles, King's College
Nelson, C. E., St. Mary's Hospital
Nesbitt, F., St. Mary's Hospital
Packer, J. M., King's College
Passmore, T. H., Guy's Hospital
Peel, R., St. Bartholomew's Hosp.
Pole, A., Edinburgh
Potts, W. J., St. Barthol. Hosp.
Reed, B., St. Mary's Hospital
Riordan, D. A., Cork
Roe, E. H., Manchester
Selwood, H. C., St. Barthol. Hosp.
Smith, G., University College
Smith, W. T., Westminster Hospital
Spencer, W. H., St. Thomas's Hosp.
Sullivan, J., St. George's Hospital
Thompson, D. R., Madras
Todd, J. W., Newcastle
Turner, Richard, King's College
Walker, B., Sheffield
Wilcox, R. W., King's College
Witherby, W. H., St. Thomas's Hosp.

APOTHECARIES' HALL.—The under-mentioned gentlemen passed their examination in the Science and Practice of Medicine, and received Certificates to Practise on Thursday the 24th ult.:—

Phillips, Joseph Dudley, Haverfordwest
Yeo, Isaac Burney, Stonehouse, Devon.

The following gentleman also on the same day passed his First Examination:—

Jones, Richard Owen, Bala, Merionethshire.

RADCLIFFE TRAVELLING FELLOWS.—The following is a list of the Fellows from the first Election to the last:—

Elected.			
July 1715	Noel Broxholme	Ch. Ch.	M.A. 1711 B. & D. M. .. 1723
July 1715	Robert Wyntle	Merton	....1709 1726
July 1725	Charles Peters	Ch. Ch.	....1724 1732
.....	James Stephens	Corpus	....1717 D. by Dipl. .. 1726
Apr. 1731	Nath. Hickman (vice Stephens, res.)	Queen's	1722
July 1735	John Kidby	Balliol	1734
Apr. 1741	John Monro	St. Jo's	....1740 B. 1743 .. D. 1747
July 1745	George Dodeswell	Ch. Ch.	....1745 B. and D. 1757
Apr. 1751	Robert Lynch	Corpus	....1745 B. 1751 .. D. 1756
Aug. 1755	David Hartley	Merton	1754
Mar. 1760	Samuel Musgrave (vice Hartley, res.)	Corpus, M.A. 1756	B. and D. 1775
May 1761	John Turton	Queen's	....1759 B. 1762 .. D. 1767
Apr. 1770	John Colwell	Trinity	....1766 B. 1769
May 1771	Francis Milman	Exeter	....1767 B. 1770 .. D. 1776
Apr. 1780	James Robertson	Balliol	.....1778 B. and D. 1783
June 1781	John Sibthorpe	Lincoln	....1780 B. 1783 .. D. 1784
June 1790	Edward Ashe	Ch. Ch.	....1788 B. and D. 1796
July 1791	James Haworth	Bras.	.....1798 B. 1791 .. D. 1793
Dec. 1800	Chas. Rich. Vaughan	Merton	....1798 All Souls, B. 1800
Dec. 1801	John Wickham	New.	..... 1798 B. ..... D. 1806
Jan. 1811	Wm. Macmichael	Ch. Ch.	....1807 B. 1808 .. D. 1816
Apr. 1812	Harry Wm. Carter	Oriel	.....1819 B. 1808 .. D. 1816
June 1821	Jas. Arthur Wilson	Ch. Ch.	....1817 B. 1819 .. D. 1823
June 1822	George Hall	Pembroke	..1820 B. 1822 .. D. 1824
July 1831	Stephen Love Hammick	Ch. Ch.	....1829 B. 1831 .. D. 1833
June 1832	Charles David Badham	Pembroke	..1829 B. 1830 .. D. 1833
July 1840	Edward Wells	New Col.	..1839 B. 1840 .. D. 1845
Sept. 1842	George Joseph Bell	Balliol	.....1842 B. 1842
Nov. 1847	James Claudius Paxton	Bras.	.....1846 B. 1847
Mar. 2, 1849	Charles Walter Eddy	Bras.	.....1848 B. 1849
July 15, 1849	Charles Thomas Coote	Pemb.	.....1847 B. 1850 .. D. 1853
1859	H. Matthews Tuckwell	Linc.	
1860	R. Southey	Ch. Ch.	

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DEATHS.

BALDWIN.—January 17, at Clobina, Ireland, Herbert Baldwin, M.D., J.P., aged 79.

BALY.—January 28, killed by a railway accident on the South Western Railway near Wimbledon, William Baly, of Queen Anne-street, Cavendish-square, M.D. Berlin; F.R.C.P. Lond.; Physician Extraordinary to the Queen.

BAYLIFFE.—January 20, Charles Bayliffe, of Chippenham, Wilts, M.R.C.S. Eng.; L.S.A. Lond., aged 52.

BELL.—January 21, at Dungannon, John Bell, M.R.I.A., and F.S.A. Scotland.

BROWNE.—January 29, William Strong Browne, of Grove-lane, Camberwell, M.R.C.S. Eng., L.S.A. Lond., aged 35.

CONOLLY.—January 10, at Bath, William Conolly, late of Hayes Park, Middlesex, M.D., aged 68.

CROUDACE.—January 3, George Croudace, of Washington, near Gateshead, Durham, M.R.C.S. Eng.; L.S.A. Lond., aged 46.

DEALEY.—January 18, at No. 4, Frederick-street, Edinburgh, Charles Dealey, late Surgeon in the Army.

DE LEUW.—January 12, at Gräfrath, Dr. de Leuw, the celebrated oculist.

DOUGLAS.—January 22, John Douglas, of Hawick, Roxburghshire, Army Surgeon; 1810, aged 72.

FISHER.—January 13, Henry Fisher, Surgeon, 4th (King's Own) Regiment, h. p., formerly of the Royal Artillery, aged 86.

FOWKE.—January 24, Thomas Henry Fowke, of Graiseley, near Wolverhampton, M.R.C.S. Eng., L.S.A. Lond.

FREER.—January 18, John Booth Freer, of New Brentford, Middlesex, formerly of Leicester, M.D. Edin., aged 79.

HAMMOND.—October 20, at his residence, Lindisfern, Morissons, Victoria, Australia, Thomas Montague Hammond, late of Brixton, Surrey, F.R.C.S., aged 34.

HASE.—January 16, Henry Hase, of Worksop, Nottinghamshire, L.R.C.S. Edin.; L.S.A. Lond., aged 52.

HOPKINS.—January 17, at Loftus, near Cleveland, Charles Christopher Erasmus Hopkins, of Marske, Redcar, Yorkshire, M.R.C.S. Eng., L.S.A. Lond., aged 43.

HORTON.—January 25, Richard George Horton, jun., Darley, Yorkshire, M.R.C.S. Eng., aged 30.

HOWISON.—November 25, on board H.M. 12-gun sloop *Persian*, on the eastern coast of Africa, William Young Howison, M.D., Assistant Surgeon, R.N. (seniority May, 1859.)

LANYON.—January 21, Edward Lanyon, of Camborne, Cornwall, M.R.C.S. Eng.; L.S.A. Lond.

MAJOR.—January 10, Harry Hopkins Pearce Major, of Hungerford, Berks, M.R.C.S. Eng.; L.S.A. Lond., aged 54.

MAUNOIR.—January 16, at Geneva, Professor J. P. Maunoir, M.D., aged 92

MAXWELL.—January 24, at Edinburgh, Niel Maxwell, M.D., formerly of the East India Companys' Service.

NORMAN.—January 17, George Norman, of Bath, Fell. (hon.) and M.R.C.S. Eng., Vice-President Brid. Med. Association, etc.

ROWE.—January 25, of apoplexy, George Robert Rowe, of Cavendish-square, formerly of Chigwell, Essex, M.R.C.P. Lond., M.R.C.S. Eng. F.S.A., and Surgeon in the Army during the Peninsular War, aged 69.

SALUSBURY.—January 20, John Salusbury, of Conway, Carnarvonshire, L.R.C.P. Edin. (exam.); M.R.C.S. Eng.

WELDON.—Recently, at Bebside, Seaton-Delaval, Northumberland, William Weldon.

A Shropshire Branch of the British Medical Association has been inaugurated by a meeting, dinner, and *conversazione* at Shrewsbury, all of which passed off with great spirit.

PRODUCTION OF INTENSE COLD.—Messrs. Loir and Drion have described a method by which many of the gases may be liquefied in considerable quantities. It depends on the cold produced by the evaporation of volatile liquids; *e g.* by blowing a current of dry air through several tubes into about seven ounces of ether, a temperature of —34° F. can be obtained, by which sulphurous acid gas may be liquefied: if, now, this liquid sulphurous acid be substituted for ether, a minimum temperature of —50° F. may be obtained; and when liquid ammonia is used as the cooling agent, the thermometer sinks to —87° F. By this temperature the authors are able to liquefy carbonic acid gas under the atmospheric pressure.

VITAL STATISTICS OF PRUSSIA.—According to the tables of the Prussian States for 1858 just published, there were in that year 12,490,715 (6,195,850 males, and 6,294,865 females) inhabitants. The births amounted to 730,170 (375,455 males, and 354,715 females); and of these 61,596 were illegitimate (31,115 males, and 30,481 females). The marriages amounted to 167,387. The number of deaths was 519,728 (268,243 males, and 251,485 females. Among the deaths 30,816 were of still-born children (viz. 15,706 legitimate males, and 11,582 females; 1884 illegitimate males, and 1644 females). There were 2126 deaths from suicide (1714 males, and 412 females); 7261 from accidents (5712 males, and 1549 females); 6606 in child-birth; 4691 from variola; and 7 from hydrophobia. The males constitute 49, and the females 51 of the population. There is 1 birth for 17 inhabitants; 1 marriage for 74; and 1 death for 24. There is 1 birth for every 16·3, and 1 death for every 23·9 of the male population; and 1 birth for every 17·7, and 1 death for every 25 of the female population. For every 11·8 births there is 1 illegitimate one; and for every 23·6 births there is 1 still-born; 1 still-born occurring to every 17·4 illegitimate births. In every 244 deaths there is 1 from suicide; in every 71 deaths one occurs from accident; and in every 110 one occurs from variola. In every 38 female deaths 1 occurs in child-birth. — *Berlin Zeitung*, 1861. No. 1.

ON Wednesday evening a meeting was held, at the residence of Mr. Alexander Squire, the President of the University College Medical Society, for the purpose of taking into consideration the proposal to form a Junior Medical Society of London, by an amalgamation of the different Medical Societies attached to each Hospital. The meeting was composed of the most influential students of the various Medical Schools in London, selected by inviting the officers and committees of the various Students' Societies. Mr. Ernest Hart was voted to the chair. Mr. Alexander Squire, of University College Hospital, was elected Honorary Secretary for the evening. The first resolution was moved by Mr. Alexander Squire, of University College Hospital, seconded by Mr. Herbert Evans, of Bartholomew's Hospital:—"That it is desirable to establish a Junior Medical Society of London by an association of the different Students' Societies attached to the several London Hospitals, with a view to promoting greater social intercourse between the students of the various Colleges, and to afford them an opportunity of becoming acquainted with, and discussing the doctrines taught, and the modes of practice followed at other Hospitals than their own."—Carried unanimously. The second resolution was proposed by Mr. Workham, of King's College Hospital, seconded by Mr. Gambier, of Middlesex Hospital,—"That a provisional committee be now elected for the purpose of promoting the establishment of a Junior Medical Society of London, such committee to be formed by the students of each Hospital here present electing two of their number to serve on it, and that the various members of it be requested to urge on their respective societies to join the general association."—Carried unanimously. This proposition having been carried out, Mr. Coleman, of St. Bartholomew's Hospital, proposed, and — Brook, of St. Bartholomew's Hospital, seconded,—"That a half-crown subscription be at once entered into for the purpose of defraying preliminary expenses."—Carried. On the motion of Mr. March, of St. Thomas's Hospital, seconded by Mr. Watson, of the London Hospital, Mr. F. Churchill, of Guy's Hospital, was appointed Treasurer, *pro tem.*, to receive subscriptions.—Carried. After a vote of thanks to the Chairman, and another to the Hon. Sec., the meeting separated.

BOOKS RECEIVED.

Consumption and Bronchitis. By J. Copland, M.D., F.R.S. London: 1861.

Catalogue of the Antiquities in the Museum of the Royal Irish Academy. By W. R. Wilde, M.D. Dublin: 1861.

How to Work with the Microscope. By L. S. Beale, F.R.S. Illustrated Edition. London: 1861.

Sore Throat and the Laryngoscope. By M. Prosser James, M.D. London 1861.

On Anchylosis, &c. By B. E. Brodhurst. Third Edition. London: 1861.

The Gastric Regions. London: 1861.

Constipated Bowels By S. B. Birch, M.D. London: 1861.

Stammering and Stuttering. By J. Hunt, Ph.D. London: 1861.

Morton's Toxicological Chart. London: 1861.

De l'Extirpation des Kystes de l'Ovaire. Par Dr. J. Worms. Paris: 1860.

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	30·069 in.
Mean temperature	41·0
Highest point of thermometer	45·6
Lowest point of thermometer	36·3
Mean dew-point temperature	39·3
General direction of wind	SW.
Whole amount of rain in the week	0·08 in.

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VITAL STATISTICS OF LONDON.

Week ending Saturday, January 26, 1861.

BIRTHS.

Births of Boys, 1034; Girls, 920; Total, 1978.
Average of 10 corresponding weeks, 1851–60, 1748·7.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	909	874	1783
Average of the ten years 1851–60	592·3	617·0	1209·3
Average corrected to increased population..	..	..	1330
Deaths of people above 90	..	..	9
Deaths in 15 General Hospitals	43	32	75

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1851.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	376,427	..	4	9	..	17	6	1
North ..	490,396	2	6	6	2	28	5	5
Central ..	393,256	..	11	4	2	15	6	2
East	485,522	3	13	4	7	21	7	4
South ..	616,635	1	3	11	1	27	15	6
Total.. ..	2,362,236	6	37	34	12	108	40	18

TO CORRESPONDENTS.

F. C. S.—We do not see how "competent Medical knowledge" could be expected from any one who had not proved, by passing an examination, that he possessed this knowledge.

G. S.—Any one who uses a secret remedy for gain is generally considered to be a quack. We hardly know what the strictly legal definition of the term may be.

Dr. Jago, Mr. Amyot, and other gentlemen, whose papers are at the printer's, will receive proofs in due course.

Anxious can enter to any Medical School before passing any preliminary examination.

ERRATUM.—By a typographical error, the subject of Dr. Guy's Croonian Lectures is incorrectly stated in an advertisement of the Royal College of Physicians which appeared in our columns last week. It should read thus:—'On Tabular Analysis applied to the Discovery of Truth in Medicine and the Allied Sciences.'"

MEDICAL ASSISTANTS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Will you kindly allow me to state in your Journal that there will be a Preliminary Public Meeting of the Medical Assistants' Provident Society the week after next, particulars of which will be duly advertised in your impression of next week. I am, &c.

MARTIN HUDSON IRVING.

7, Hill-road, St, John's-wood, N.W., January 28.

PREVENTION OF BLACK-EYE.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—A friend of mine was this morning consulted by a young lady who had met with an accident, causing considerable ecchymosis in the neighbourhood of the left eye. Mentioning the subject to me, I suggested the application of ice. Can any of your numerous readers communicate a remedy which will more quickly remove the discoloration? I am, &c.

Burton-on-Trent, January 29. FRIGOS.

VOLUNTARY DISFIGUREMENT.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Can you refer me to any easily-accessible works, treating of the various distortions and disfigurements of the human frame practised in different quarters of the globe, and amongst both civilised and savage races of men? I shall be obliged by information on the subject from any of your numerous readers and correspondents. I am, &c.

Richmond, Surrey. R. W. HACKWOOD.

CLIMATE OF IRELAND AND ENGLAND,

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In connexion with the late severe cold, a fact of some little importance to us, as Medical men, appears in the meteorological returns, which, I think, has not attracted the notice it deserves. We are often asked to recommend a winter residence to a phthisical or other patient, at once mild, not too expensive, and (under favour of one particular school of pathologists) well ozonised,—in other words, near the sea-side. We have all these conditions, according to late reports, on the south-west coast of Ireland. This mildness of the west of Ireland was long since described by Humboldt, and as the cause of it is a permanent one, the educated Physician should not lose sight of it. The difference of average temperate between a winter in England and one in Ireland, in view of the Atlantic from Cork or the Irish Biarritz (Kilkee), is something like ten degrees—an enormous thing in a matter of climate. Humboldt's explanation (which I have verified by enquiries of various captains of vessels crossing the Atlantic) is very curious and convincing. He says, "From the burning-hot acclivities and mountains of Central America a heated torrent rushes constantly down, through the Gulf of Mexico, into the Atlantic. The revolution of the earth from east to west favours its transit across the Atlantic till stopped by the coast of Ireland." Captains of ships, as just remarked, know this fact very well practically, though not the explanation of it. A very esteemed friend, the Protestant rector of the chief parish along the Irish western coast, has a dozen times at least drawn my attention to the extraordinary fact, that during a winter residence of several years on the spot he has found the sea always warm, and he has never seen such a thing as snow or frost. The late Sir H. Marsh, who knew this part of Ireland better than any other part, was also well aware of the fact. Twenty miles inland from the coast, however, the climate changes gradually to something like that of Belgium, except at Killarney, where it is very like that of Westphalia—always raining,—but even in the centre of the island, and on the most eastern coast—Dublin and Wicklow—the winters are never at all so severe as in England. I say nothing of the Spitzbergen breezes that freeze the soul of every student who passes a winter in Edinburgh. I am, &c.

Sackville-street, Jan. 20. CHARLES KIDD, M.D.

COMMUNICATIONS have been received from:—

Professor SIMPSON; M. CLAUDE BERNARD; Dr. R. LEE; Dr. HILLIER; Dr. FAIRLESS; Dr ARNOTT; Dr. MERRIMAN; Mr. SOLOMON; Dr. F. ADAMS; Dr. GRAILY HEWITT; Dr. WILDE, Dublin; Mr. FIELD, Brighton; Mr. HOLMES; Mr. AMYOT; Dr. JAGO; Mr. GRIFFIN; Dr. USSHER; Mr. CRAWSHAY; Mr. DICK; Mr. DICK; Mr. COPNEY; Mr. DUNLOP; Mr. STEELE; Mr. SQUIRE; Mr. VINCENT; Mr. RIVERS; Mr. IRVING; Dr. W. A. SMITH, Bangatore; and Dr. MARTIN.

APPOINTMENTS FOR THE WEEK.

February 2. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's 2 p.m.; Charing-Cross, 1 p.m.

ROYAL INSTITUTION, 3 p.m. Dr. E. Frankland. "On Inorganic Chemistry."

4. *Monday*.

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

ROYAL INSTITUTION, 2 p.m. General Monthly Meeting.

EPIDEMIOLOGICAL SOCIETY, 8 p.m. Dr. Bryson, "On the Recent Introduction of Yellow Fever into Port Royal, Jamaica."

5. *Tuesday*.

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Professor Owen "On Fishes."

6. *Wednesday*.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m. Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

OBSTETRICAL SOCIETY OF LONDON, 8 p.m. Dr. Tyler Smith "On Ovariotomy, with Cases." Dr. Madge "On a Case of Peri-Uterine Hæmatocele," etc.

7. *Thursday*.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Professor Tyndall "On Electricity."

HARVEIAN SOCIETY OF LONDON, 8 p.m. Dr. Pollock "On What we Know of Phthisis Regarding its Cure."

8. *Friday*.

Operations, Westminster Ophthalmic, 1½ p.m.

ROYAL INSTITUTION, 8 p.m. Professor J. H. Huxley "On the Nature of the Earliest Stages of the Development of Animals."

EXPECTED OPERATIONS.

Metropolitan Free Hospital.—The following Operation will be performed on Monday next, at 2 o'clock:—

By Mr. Borlase Childs—Lithotomy.

Westminster Hospital.—The following Operations will be performed on Tuesday next, at 2 o'clock:—

By Mr. Holt—Excision of the Elbow-joint; Amputation of the Breast; Partial Amputation of the Foot.

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FINAL REDUCTION OF WINE DUTIES, from 1st January, 1861.

W. and A. Gilbey, Wine, Spirit, and LIQUEUR IMPORTERS and DISTILLERS, will send, on application, their detailed Price-list of the peculiar Wines and Spirits of every Country, and can be tasted at each of their Establishments in England, Ireland, and Scotland; at either of the London Docks, and Bonded Warehouses; at their large Cellarage under the Princess's Theatre; at their Warehouses in Great Titchfield-street; or at their Counting-house and Sample-rooms, 357, Oxford-street, London (three doors from the Pantheon).

W. and A. G.'s connexion—extending to 20,000 Families, and upwards of 80 of the chief Hospitals, Military Messes, and Public Institutions—offers every reasonable guarantee to inspire confidence in their mode of doing business.

The Custom-house returns for 1860 show that W. and A. G. paid duty on, in the course of a year, 100,074 gallons of Wine.

WINES FROM FRANCE at the Reduced Duty.

Bordeaux Red Wines—Clarets Vin Ordinaire, 14s.; Bordeaux, 14s; Medoc, 16s., &c.
Bordeaux White Wines—Graves, 16s.: Barsac, 16s., &c.
Burgundy Red Wines—Beaune, 21s.; Macon, 21s., &c.
Burgundy White Wines—Chablis, 18s.; Pouilly, 22s.
Rhone Red Wines—Verinay, 16s.; St. George, 18s., &c.
Also any of the above can be had in Pints or Half-pints.
For other French Wines, see List, sent on application.

Sparkling Champagne, 32s. quarts, and 17s. 6d. pints. (This Wine possesses great delicacy, exquisite bouquet, and is good enough for any gentleman's table. It is the produce of one of the finest Epernay Vineyards, where we have contracts for direct and regular shipments. We append this remark, as many are under the impression that good sparkling Wines cannot be obtained, but by paying exorbitant prices.) Also other Champagnes. See List, sent on application.

Sparkling White Burgundy, 42s.; Sparkling St. Peray, 42s.; and Sparkling Red Burgundy, 48s.

WINES FROM THE RHINE at the Reduced Duty.

White Wines—Niersteiner 14s.; Hattenheimer 16s.; Hochheimer 16s.; Oestricher 18s., &c.

Sparkling Moselle 38s. quarts, 21s. pints, and 12s. 6d. half pints. (This Wine—as fine as can be grown—possesses all the delicacy of Champagne, with the superiar character and aroma which the Muscatelle grape of this district only produces.)

Sparkling Hock 38s. quarts, 21s. pints, 12s. 6d. half-pints.

WINES FROM SPAIN at the Reduced Duty.

Sherry (Pale or Gold) 24s. per doz., or in cask, £4 0s. 6d. per 7 gall. £7 19s. 3d. per 14 gall., and £15 15s. per cask of 28 gall.

The alteration of the Duty enables us to import a really good sound dinner Wine at the above prices.

WINES FROM PORTUGAL at the Reduced Duty.

Port, for 5 years in the wood, 26s. per doz., or in cask, £4 7s. 6d. per 7 gall. and £8 13s. 3d. per 14 gall., £17 3s. per quarter cask of 28 gall.

Port, 8 years in the wood, 28s. per doz., or in cask £4 14s. 6d. per 7 gall., £9 7s. 3d. per 14 gall, £8 11s. per 28 gall. cask.

We cannot too strongly recommend to Port consumers these matured Wines from the wood—they are the old school of silky Oporto Wine, and certainly more palatable and wholesome than those extremely high-priced and old Bottled Wines, which have nothing left to recommend them but vegetable decay. The public are now beginning to realise what we long ago advocated, that a Wine matured in the wood is preferable to Wine old in Bottle.

WINES FROM THE CAPE OF GOOD HOPE.

Port, Sherry, Madeira, &c., all First Growth, 18s. per dozen, £2 19s. 6d. per 7 gallon cask, £5 17s. 3d. per 14 gallon cask, and £11 11s. per quarter cask of 28 gallons.

Also first growths with age 22s. per dozen, £3 13s. 6d. per 7 gallon cask, £7 5s. 3d. per 14 gallon cask, £14 7s. per 28 gallon.

They are delicate, wholesome, and in every way suitable for either dinner or dessert. In the present state of the Wine Markets, there are no Wines we can import to offer to the public as better value for money.

WINES FROM MARSALA at Reduced Duties.

Bronte Marsala, 20s. per dozen, £3 6s. 6d per 7 gallon cask, and £6 11s 3d. per 14 gallon cask, and £10 3s. 6d. per cask of 22 gallons.

SPIRITS at the Reduced Duty.

We have resolved to send out all Spirits at the highest strength allowed by law. For particulars see pages 10 and 11 of prices current.

BRANDY, "Universal," very fine	16s. 6d. per gallon.
Do. the finest Cognac	24s. "
RUM, finest Jamaica	18s. "
WHISKY, pure old Scotch	18s. "
Do. pure old Irish	18s. "
GIN, excellent Household	13s. "
HOLLANDS, Geneva "Silver Stream" ..	14s. "
Do. do, in the original green Cases and square Bottles, as imported	32s. per dozen.

A small sample of the above Wines will be sent for 6d., except French and Rhenish, which can be had in half-pints.

A detailed Price-List on application of the particular Wines of every country.

In England, Cheques to be crossed to our Bankers, the Bank of England; and Post-office Orders made payable to the General Post-office, London; in Ireland, the Bank of Ireland, and General Post-office, Dublin; in Scotland, the Bank of Scotland, and General Post-office, Edinburgh.

W. and A. GILBEY, 357, Oxford-street, London.
31, Upper Sackville-street, Dublin. 12, St. Andrew's-square, Edinburgh.

S. Bowles, late Windsor & Co., Phial and BOTTLE MERCHANTS, Dealers in Druggists' Sundries, &c. 6, James-street, Covent-garden, W.C. The Cheapest House in London for every description of Medical Glass of the best quality.

Samples and Prices forwarded free on application.

To Physicians, Surgeons, and DRUGGISTS.—BROWN'S CANTHARIDINE BLISTERING TISSUE, prepared from pure Cantharidine. An elegant preparation, vesicating in much less time than the Emp. Lyttæ, P.L., easily applied and removed, and will not produce strangury, or troublesome after-sores. It has received the sanction and commendation of many of the most eminent Practitioners in the Kingdom. In Tin Cases, containing ten feet, 6s. 6d.; and small Cases of five square feet, 3s. 6d. each.

BROWN'S TISSUE DRESSING, an elegant, economical and cleanly substitute for all ointments as a dressing for Blisters, and may be called a companion to the above. In Tin Cases, containing twelve square feet, 1s. 6d. each.

EXTRACTS AND EDITORIAL NOTE FROM THE "NEW YORK JOURNAL OF MEDICINE."

"March 1, 1850.

"BROWN'S CANTHARIDINE TISSUE.—It presents peculiar claims to our notice in the inflammatory diseases of females and children, in whom the unpleasant consequences which so often follow the application of the Emp. Cantharides are most apt to occur. We have found it a reliable and peculiarly safe vesicant, and from the many trials we have given it, we are satisfied that it deserves the attention of the Medical Profession.

"Accompanying this article is a very simple and neat dressing."

"I have prescribed the Cantharidine Tissue and Dressing (as prepared by you), for the last ten years. I have much satisfaction in bearing testimony to its effectual, mild, and safe action as a vesicant on the most delicate skin, and one of the best auxiliaries in the successful treatment of congestive and inflammatory diseases; the dressing has the advantage of being cleanly, agreeable and curative in its application.

"JOHN PURSELL, M.D., F.R.C.S.E.

"Kennington Park, Surrey, February 12, 1857.

"To Mr. T. B. Brown."

"Army Medical Department, January 16, 1847.

"The Principal Medical Officer of the General Hospital, Fort Pitt, Chatham, reports that Mr. Brown's Blistering Tissue has been used extensively in the Military Hospital, has been found effective as a vesicatory, when carefully applied, and has not been productive of any degree of strangury. "ANDREW SMITH, M.D.

"Deputy Inspector-General of Hospitals.

"Mr. T. B. Brown, Birmingham."

Sold by the Sole Consignees, WILLIAM BAILEY & SON, Horseley Fields Chemical Works, Wolverhampton; and by all Wholesale and Retail Druggists and Medicine Agents throughout the British Empire.

Chlorodyne.—J. T. Davenport begs to direct attention to the disgraceful and fraudulent practice of certain parties, who apply the term "CHLORODYNE." to compounds of THEIR OWN MANUFACTURE, WELL KNOWING that the word is applied to a remedy SOLELY DISCOVERED and INTRODUCED by Dr. J. COLLIS BROWNE, M.R.C.S.L. (late Army Medical Staff), the formula of which is confided to J. T. DAVENPORT, and NONE other;—hence the assumption of the title, claim to discovery, or manufacture of CHLORODYNE by any other persons is a direct palpable deceit and imposition.

The Medical Testimony, published on the extraordinary properties of this remedy, is exclusively applied to

DR. J. COLLIS BROWNE'S CHLORODYNE.

WHOLESALE DEPÔT—33, Great Russell-street, Bloomsbury-square, London.

Blancard's Pills of Unchangeable IODIDE OF IRON.

Recommended by the Academy of Medicine of Paris,
And authorised by the Medical Council of St. Petersburg,
Extensively tried in the Hospitals of France, Belgium, Ireland, Turkey, &c.
Favourably noticed at the Universal Exhibition of New York, 1853,
and Paris, 1855.

"Of all the modes hitherto proposed of administering Iodide of iron in the pure state, I think Mr. Blancard's the best."—Chemistry applied to Therapeutics, by M. Mialhe, Deputy-Professor to the Faculty of Medicine of Paris, Pharmacien to the Emperor, 1856, p. 319.

These Pills stand now very high in the therapeutics of every country, as may be seen by the above quotations, and also by the numerous scientific articles in medical periodicals and works (a).

Being enveloped in a very thin resino-balsamic coating, they present the great advantage of not being liable to any deterioration, of having no taste, of being small, and not distressing the stomach. As they possess the properties both of iodine and iron, they are especially beneficial in chlorotic, scrofulous, tubercular, or cancerous affections, as also in leucorrhœa, amenorrhœa, anæmia, &c. &c., and they furnish the medical man with an excellent means of modifying lymphatic, feeble, and debilitated constitutions. Dose, 2 to 4 pills a day.

N.B.—Impure or altered Iodide of Iron is an unsafe remedy, and may even prove dangerous. Only such bottles as bear an electro-plated seal fixed to the lower part of the cork, and the signature of the inventor placed on a green label, are to be considered as prepared by Mr. Blancard. The public should beware of spurious imitations.

To be had at M. BLANCARD'S, Pharmacien, No 40, Rue Bonaparte, Paris. General dépôt in England at M. Gabriel Jozeau's, French chemist, 49, Haymarket, London. In the United States, at E. and S. Fougera, Chemists, 30, North William-street, New York. To be obtained retail from the principal Chemists.

(a) Bulletin de l'Académie de Med. 1850, page 1015; Gazette Médicale, Aug. 17, 1850; Union Médicale, Aug. 15 and 22, 1850; Gazette des Hôpitaux, March 15, 1853, and June 10, 1854; Gazette Hebdomadaire de Médecine et de Chirurgie, Aug. 31, 1855; Revue de Thérapeutique Médico-Chirurgicale, Feb. 15, 1855; Abeille Médicale, Revue Clinique; Repertoire de Chimie et de Pharmacie; Annuaire de Thérapeutique pour 1851, page 199; Orfila, Elements of Chemistry; Mialhe, Chemistry applied to Therapeutics, 1856, p. 319; Quevenne, Essay on the Physiological and Therapeutical Action of Preparations of Stee', page 97, 1854; Bricheteau, Treatise on Chronic Diseases seated in the Respiratory Organs; Soubeiran, Treatise on Pharmacy; Dorvault, Officine, &c. &c.

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ORIGINAL LECTURES.

CLINICAL LECTURES
ON
THE DISEASES OF WOMEN.

By J. Y. SIMPSON, M.D. F.R.S.E.
Professor of Medicine and Midwifery in the University of Edinburgh.

Lecture XXXVI.
ON SUPER-INVOLUTION OF THE UTERUS AND AMENORRHŒA.

Gentlemen,—In my last Lecture I directed your attention to the morbid condition of the uterus which results from an arrest of the retrograde metamorphosis that usually takes place in that organ subsequent to delivery. I explained to you how, from the occurrence of inflammation in the uterus or its appendages, the intermediate process of fatty degeneration, by means of which it becomes reduced to its normal dimensions, after parturition, sometimes becomes interrupted; and how the organ may thus be left in a condition of permanent puerperal hypertrophy; and how, in such cases, you might be able to afford your patient the most effectual relief, I tried also to explain to you.

To-day I propose to direct your attention to a morbid state of the uterus which is precisely the opposite of that to which I refer, and which is produced when the disintegrating process that is set up after delivery goes on to such an excessive degree as to reduce the organ to a size decidedly below its normal dimensions in the unimpregnated condition. The hypertrophy resulting from a defective degree of degeneration and diminution of the womb, or *sub-involution*, is, as I told you, one of the most common of uterine disorders. The atrophy that results from excessive resorptive action in the uterus, or *uper-involution*, is, on the other hand, a phenomenon of comparative rarity; but that it does ever and anon occur, is a matter as to which there can be no dispute. I have seen in practice a very considerable number of cases of this morbid state; but I have rarely had opportunities of examining into its nature on the dead subject. Several years ago I published the history of a case of this kind occurring in a young woman of twenty years of age, who never menstruated after her first delivery, and where the morbid condition in question was traced, both during life and after death. It was two years subsequent to her confinement that this patient sought admission to our Clinical Ward, in consequence of amenorrhœa and great constitutional debility. She was then subject to various distressing symptoms in connexion with the pelvic organs, and stated that she was subject to frequent attacks of diarrhœa, which she believed to be most severe at recurring monthly intervals; the dejections being then sometimes tinged with blood. The mammæ were shrunk and flat; and she was thin, feeble, and anæmic in appearance. On making a vaginal examination, I found the uterus small and mobile, the cervix uteri much atrophied, and its vaginal portion scarcely forming any projection into the cavity of the vagina. The os uteri was so contracted as to admit with difficulty a Surgeon's probe. It was dilated by a slender bougie left in it for a few days, and when the sound was subsequently introduced, the uterine cavity was found to be only an inch and a-half in length. Various remedial measures were adopted without any very marked effect; and as the uterine symptoms seemed to be only of secondary importance, she was transferred to another ward, where she died in the course of a couple of months in a state of prolonged coma. During her stay in the Hospital she suffered from frequent, and sometimes severe attacks of diarrhœa, and about a month before her death, albuminuria and general dropsy had set in. At the post-mortem examination crude tubercles were found in both lungs. The liver was enlarged, and showed fatty degeneration. The kidneys presented also some stearoid degeneration; and in the right there was a small tubercular abscess. The large intestines were very much thickened in their parietes, and contracted in their calibre; their mucous membrane was ulcerated in various parts. At the lower end of the ileum several large ulcerations were seen running circumferentially around the interior of the bowels. One or two ulcerations were also found in the stomach. The uterus was very small, and atrophied in its length and breadth; its size being diminished about a third below the natural standard in all its measurements, and its parietes were correspondingly thin and reduced. The whole length of the uterine cavity, from the os to the fundus, was not more than one inch and a-half, instead of two inches and a-half as in the normal condition. When a section was made of the posterior wall of the organ, the thickness of its parietes at their deepest or most developed portion was not above three lines, instead of five or six. The tissue of the uterus appeared dense and fibrous. The ovaries were also much atrophied and smaller than natural: their tissue was dense and fibrous, and presented no appearance of Graafian vesicles. There was no inflammatory deposit on the peritoneal surface of the uterus or its appendages; but there was some thick pus, or tubercular matter, in the distended cavity of the right Fallopian tube.

In this case we have evidence of the most unmistakeable kind that the uterus of a woman, in whom all the genital apparatus was so perfectly developed as to allow of her giving birth to a fully-formed child, became atrophied to such a degree, subsequently to her delivery, as to be incapable of again resuming its functional activity. How this excessive wasting of the womb is produced it is difficult to understand. Remembering that when inflammation is going on in any organ or tissue, the function of absorption is there in abeyance, we can understand how the process of absorption after delivery should be checked in the uterus, by the occurrence of inflammation in its walls; and how in such a case the womb should be left in a permanently hypertrophied condition, when the absorptive action is not subsequently re-excited. We can even imagine that interruption to the free flow of blood through the uterine vessels, resulting from the patient getting up too soon after her confinement, should lead to a certain degree of congestion in the uterus, and should so far interfere with the process of absorption as to leave the organ in a state of abnormal hypertrophy. But we do not yet know enough of the normal process of involution of the uterus; the reason why the fatty metamorphosis and the subsequent absorption go on exactly to such a point that the uterus is restored almost precisely to its previous dimensions, has not been sufficiently elucidated to enable us to form any probable idea as to the causes which lead to its super-involution and permanent atrophy. Observations even are wanting to show whether this atrophy of the uterus depends upon a morbid degeneration and destruction of fibres that ought to have remained entire; or, as is more probably the case, on some defect in the development of the new cells and fibres that should have taken the place of those that had become effete. A uterus, which has undergone this morbid change, is found after death, as I have said, to be abnormally small. Instead of measuring two and a-half inches or so in length, and one and a-quarter in breadth, it is seen to possess little more than a half, or two-thirds of those dimensions; and this diminution in size affects, not only the body and fundus, but the cervix as well, so that instead of projecting into the vault of the vagina the os uteri seems simply to form a depression in the upper extremity of that canal. The walls of the uterus are at the same time extremely thin—hardly thicker, in extreme cases, than the coats of the intestines, and so friable as to be readily perforated by the point of a sound incautiously introduced. The whole organ, in short, presents all the appearance of the uterus of a girl not yet arrived at puberty; and differs from it only in this, that whereas the latter is in a condition to become enlarged, and to furnish the ordinary menstrual secretion so soon as a sufficient stimulus shall have been applied to it in consequence of the changes connected with ovulation, the super-involuted uterus has undergone such morbid alteration as renders it unable any longer to respond to the ordinary ovarian influences. And here, again, arises an interesting question in regard to this subject which it remains for future histological research and pathological experiment to answer, viz., what is the cause of this insensibility of the super-involuted uterus to the reflex irritation which seems to be conveyed towards it from the ovaries at each menstrual period? Is it merely that the muscular fibres of the uterus have been so degraded and destroyed as to be insusceptible to the stimulus that usually calls them

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into functional activity? Or have the nervous filaments that traverse the uterine walls also shared to such an extent in the general atrophy as to be incapable of conducting the influence they ought to convey to the structures in which they ramify? Or have the uterine vessels been so wasted as to furnish an insufficient supply of blood? Or, finally, are the ovaries themselves in a perfectly normal condition, or have they, too, become morbidly altered in structure and impaired in function as a consequence of their intimate association with the diseased and degenerated uterus? These are all questions to which we are at present unable to furnish any adequate reply; but they offer such a tempting field for investigation that I trust some one will ere long try to discover their solution. Meanwhile, let us see what peculiar phenomena result from this morbid condition of the uterus and the means by which it may be recognised. Let us study, in other words,

The Symptoms and Diagnosis of the Disease.

The symptom that in most cases first alarms the patient, and which generally induces her to seek your aid, is the continued suppression, or very small and imperfect amount, of the menstrual discharge. Formerly, in all probability, she used to menstruate regularly, and when the term of utero-gestation and the period of lactation have been brought to a close, and her child has been weaned, she wonders why the usual monthly flow does not reappear. She is quieted for the moment by the assurance that, in some cases, the recurrence of the catamenia may be retarded for a time without any ultimate disturbance of the general health. But, as months pass on, and no discharge at all, or only a very imperfect degree of it, returns, unfulfilled expectation grows into alarm, and not unreasonably; for now the breasts tend sometimes to shrink and shrivel up, the subcutaneous adipose matter begins to be absorbed, so that the skin looks withered and wrinkled, and the patient, though still, it may be, young in years, offers often prematurely to assume the aspect of age. The whole system usually sympathises with the change that has been effected in the uterus, just as it does in women who have reached the climacteric period, and in whom the uterus normally ceases from all functional activity; and the appearances which are familiar to you as the normal characteristics of women who have passed that period of life, begin to be abnormally presented by the patient in whom the functional powers of the uterus are destroyed, as a consequence of the morbid process that leads to its atrophy. It results, further, from the morbid condition of the womb, and from its inability any longer to perform its normal functions, that the patient becomes henceforth sterile, and the oppressive idea that she will never have any more family comes to be added to the burden of her other troubles. Most frequently, too, she is in a state of marked constitutional ill-health; she is very anæmic; her digestive powers are low; she has frequent headaches; is easily fatigued; and is the subject of general debility, and shows often, also, depression and impaired activity of mind.

Physical Diagnosis.

To ascertain the true state of matters in such a case you must have recourse to a local examination of the uterus itself. On passing the finger into the vagina you feel the cervix uteri unusually small, and quite on a level with the vault of the vagina; or projecting into it so slightly as not to be at once easy of recognition. The womb feels unusually small and light, and moveable; and although the abdominal walls may be very thin and relaxed, yet the organ cannot well be felt between the hand placed over the fundus and the finger exploring per vaginam. The os is small and admits only a narrow-pointed sound; or, as in the case I have detailed to you, nothing larger than a Surgeon's probe. In introducing the sound great care must be taken not to press it rudely on, for the walls are thin and very friable; and I have seen a sound thus rashly introduced, and forced with but little effort through the uterine parietes into the cavity of the peritoneum. I have known of this accident happening in more than one instance; and although no bad consequence has ever, so far as I am aware, resulted from it, and although the sound may, doubtless, be passed into the peritoneal cavity with impunity, yet it is not an experiment one would willingly and wittingly repeat. When the sound, then, is introduced in such a case with all due amount of caution, its point will be found to be obstructed and stopped when it has passed only to a distance of one and a-half or two inches, showing that the organ is preternaturally diminished in size.

Is there anything, you will naturally inquire, that we can do in the way of treatment in this form of disease? Is there any means of restoring the womb to its normal condition, and the patient to the enjoyment of her former good health? I think I can point out to you various measures which you may adopt with benefit to your patient, and sometimes with a good hope of being able to effect for her a perfect cure from her malady. But as the remarks which I have to make in regard to the treatment of this form of disease are equally applicable to the treatment of some cases of Amenorrhœa, you must permit me now to endeavour to explain to you the nature of the morbid condition or conditions under which those women labour who are the subjects of

Amenorrhœa.

You are not to imagine, let me observe, that every woman who is the subject of amenorrhœa is necessarily suffering under some form of disease. During pregnancy and lactation, for example, the menstrual secretion is normally suspended, and the function of the ovaries, so far, at least, as regards the maturation and separation of the ova, seems at the same time to be in abeyance. We do not understand precisely what is the peculiar state of the system in nursing and pregnant women which leads to the interruption of the functions of the ovaries and uterus; and it is quite possible that in many other cases besides, amenorrhœa may be dependent on some similar constitutional condition, which interferes with the regular ripening and discharge of the ova, although the patient presents no evidence of any special malady. Looking at amenorrhœa, however, as a distinct disease, we find that the forms which it assumes are so various, and the cases of it which come under observation are sometimes so complex, that it is difficult to construct such a classification as shall present all those different forms in their proper natural order, and at the same time enable you to determine the exact position in that series of any case that may hereafter meet you in practice. Dr. Churchill, in his treatise on "The Diseases of Women," perhaps the best work on that subject in the English, or in any other language, has divided Amenorrhœa into two classes, according as, 1st, The menses had never appeared at all (*Emansio Mensium*); or, 2nd, The menses had appeared once or oftener, and had afterwards become arrested (*Suppressio Mensium*). Each of these two classes are further divided by him into secondary groups, which in their turn are subdivided. Again, Becquerel describes the disease as being of two kinds—Complete, or Incomplete; while Scanzoni treats of it under the three varieties of Retarded Menstruation, Premature Cessation, and Complete Absence of the Catamenia. But perhaps you will best understand the different forms of the disease, and recognise the special character of individual cases, if I endeavour to describe it to you simply in connection with the various pathological and physiological conditions with which it is usually associated. Thus you may have Amenorrhœa—

1. *From Congenital Malformation of the Generative Organs.*—In practice we occasionally meet with cases where the patient has all the symptoms usually associated with the catamenial flow coming on regularly every month, and yet no discharge ever appearing externally. On making a local examination of such a case we find that the menstrual secretion actually does take place; but that it is hemmed in so as to form a tumour of greater or less size from its accumulation in the vagina and uterus, in consequence of the existence of a strong, tough hymen opposing its escape. More rarely the obstruction is due, not to a preternaturally strong hymen, but to a congenital closure of the vaginal canal from organic adhesion of its opposing walls. In such cases the higher organs—the uterus and the ovaries—may be, and usually are, in a perfectly normal condition. But there is another series of cases, where the ovaries and uterus are either altogether absent, or exist only in a rudimentary condition; and where, consequently, the amenorrhœa is due, not to the retention of the fluid secreted within the generative canals, but to the actual non-secretion of the catamenia. The vagina may then be entirely absent; or it may end in a cul-de-sac, which admits the finger to the depth of one or two inches. The uterus is either completely absent, or is represented only by a small nodule, which can be felt on making an examination per rectum, and pressing against the exploring finger with a

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sound or catheter introduced into the bladder. But though the absence of the uterus can thus be determined with perfect precision, it is a matter of great difficulty to make out the exact condition of the ovaries; and in such cases we can usually decide as to their presence or absence only by observing whether or not any of those physiological phenomena exist which we believe to be called forth by their agency alone. A case of this kind some of you had an opportunity of studying in a patient who has recently been dismissed from our ward in the Hospital. Let me recal to your recollection the facts of her history as they have been recorded in the Hospital Case-book:—

"J. B., aged 22, married, residing in Edinburgh, was admitted on November 7, 1860. The patient states that at the age of nineteen she experienced pains in the loins and thighs, and shooting pains in the mammæ, the right one enlarging somewhat. On rising from bed one morning, during the time that she was suffering these pains, she found a bloody stain on her night-dress, but she cannot say whether it came from the rectum or not. Thrice during the following two days she vomited blood, and bled at the nose, the whole amount lost being about half-a-pint; but there was no discharge from the genital passages. Ever since, up to the time of her marriage, she suffered monthly pains in the loins and breasts, and occasionally vomited blood. About twelve months ago she again noticed a bloody stain on her night-dress.

"In January last, after being courted for eighteen months, she married, never having entertained a suspicion that she was the subject of any malformation of the sexual organs. Both previously to her marriage and since, she has repeatedly experienced sexual desire. Since her marriage she has frequently had bleeding from the nose at the monthly period.

"On examination the vagina is represented by a cul-de-sac about two and a-half inches deep; it is conical, so that the blind extremity admits only one finger, while the orifice admits two or three. There is no os uteri or cervix. When examined by the rectum a very small nodule is felt at the end of the cul-de-sac. A sound introduced into the bladder, is felt by the finger in the rectum, with only the walls of the rectum and bladder intervening. On making an examination with the left hand through the abdominal wall, and the forefinger of the right passed into the rectum, the situation usually occupied by the uterus is felt to be perfectly empty. The mammæ are fully developed. The voice is quite like that of a woman. There is no trace of hair about the chin. She is of middle stature, with dark hair and eyes, and fair skin.

"November 19.—For the last two days she passed blood from the rectum, on several occasions during each day. This was accompanied by the usual uneasiness attending menstruation. On pressing firmly into the iliac region, a dull pain was experienced. The discharge of blood from the rectum, as well as the pains, ceased this morning, and she states that, as usual, she feels 'lighter' than for the few days previously.

"December 13.—An attempt to dilate the canal by an air-pessary has been repeatedly made, but no appreciable expansion has been effected. Two or three days ago, at the usual period, she again for two days discharged blood from the rectum. She was dismissed, by request, to-day."

In the case of this unfortunate woman, the results of the physical examination hardly leave a doubt as to the complete absence of the uterus; while the monthly recurrence of the vicarious hæmorrhages, with their attendant symptoms, and the declared existence of a sexual appetite, seem as clearly to indicate the existence and the action of the ovaries. Last year I had under my care a lady who presented the same kind of defective development of the uterus and vagina, but who at one time deluded herself and her doctor into the belief that she had become impregnated. In her the vaginal cul-de-sac was even shorter than in the case of our Hospital patient, but there was a greater thickness of tissue to be felt between the bladder and the rectum. In the hope of discovering a rudimentary uterus imbedded in this tissue, I made an incision into it to the depth of about two inches. No trace of the uterus, however, was to be found; but the operation was followed by this good result, that by keeping the cavity of the wound open by means of bougies and sponge-tents until the raw surface had healed, a vaginal canal was produced, where formerly there was only a shallow sinus. In cases of congenital malformation of the generative organs we may, then, have two varieties of amenorrhœa:—First, One class of cases in which the amenorrhœa is genuine and complete, and in which there is a defective development in the organs essential for the production of the characteristic catamenial discharge; and, Secondly, Another class in which the amenorrhœa is only apparent and temporary, the secretion really taking place, but its escape being prevented by an abnormal occlusion of the passages. In the one class of cases all hopes of cure are vain. In the other the function is restored to its normal state by simple incision of the obstructing membrane or dilatation of the occluded canal, a morbid condition upon which, and upon its treatment, I dwelt at some length in a former Lecture.

(To be continued.)

LECTURES
ON
THE SPINAL CORD,
DELIVERED AT
The College of France,
DURING THE SUMMER SESSION 1860,
By M. CLAUDE BERNARD,
Member of the French Institute; Professor of General Physiology at the Faculty of Sciences, &c.

Lecture VI.
ON THE NEW PHYSIOLOGICAL PROPERTIES ACQUIRED BY DIVIDED NERVES.

Summary: The Exaggeration of Vital Properties which takes place when all Communication with the Brain has been interrupted, is observed in all Parts of the Nervous System—All divided Nerves exhibit, during a certain Space of Time, a higher Degree of Excitability than in the Normal State—Sensibility viewed as totally distinct from Pain—Impressions produced upon the Nerves are not to be confounded with the Mental Act of Perception which appreciates them—Various Experiments on this Subject—The Powers of Motion participate in the increased Activity which arises in divided Nerves—Medicaments and Poisons act with greater intensity upon divided Nerves than upon sound ones—The Augmentation of Excitability met with in such Cases is one of the first Symptoms of approaching Dissolution—The Muscles share in this Property as well as the Nerves—All Tissues in general acquire a higher Degree of Excitability when Nervous Influence is withdrawn—The Nerves, therefore, do not always stimulate the Vital Powers, but are often Instrumental in repressing them—Reflex Actions—In what manner produced—Pathological Cases related by Magendie and other Physiologists—The Sympathetic Nerve also exhibits a superior Degree of Activity when divided—Effects produced upon this Part of the Nervous System by the Section of the Pneumogastric Nerve—Convulsions produced by Asphyxia in Animals, the Spinal Cord of which has been divided—M. Brown-Séquard's Experiments—Reflections on this Subject.

Gentlemen,—That the division of the posterior tracts of the spinal cord on one side, far from extinguishing all sensibility in the corresponding regions, produces an exaggeration of the sensorial power, is a fact, the experimental demonstration of which was placed before you at our last meeting. This extraordinary result brings to our knowledge one of the most important laws of life, which, prevailing as it does throughout the entire extent of the nervous system, evidently claims our closest attention. All nerves separated from the parent trunk, are found to acquire an additional degree of excitability, which for the time being, renders them infinitely more sensible to the action of external stimulants than in the healthy state.

But, in order to understand the general considerations into which we are about to enter, you must always bear in mind that sensibility, viewed as a physiological property of the nervous system, is altogether distinct from pain, and frequently reveals itself by producing effects of a totally different nature. The organs of vision afford a striking instance of this; and the same may be said of the spinal cord, which transmits the impressions made upon the nerves, but receives none, from the direct action of external causes. We meet, therefore, with certain special properties in nerves, which bear no reference to the mind, which are independent of the will, and of which the subject is quite unconscious: they continue, therefore, to exist in nerves which no longer communicate with the central apparatus of sensation and motion. In other words, nervous excitability, and the transmission of its effects, must not be confounded with the mental operation which perceives them, after they have been produced; to this

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latent sensibility, to these involuntary movements alone, are the following reflections to be referred. (a)

We place before you the frog on which the unilateral division of the spinal cord was performed the other day; and you will be able to judge at once of the difference existing between the sensibility of the lower limbs, in this animal, and in another Batracian, which has not been interfered with.

[The posterior extremities of these two frogs being dipped into acidulated water, the former draws up its leg on the wounded side, while the other allows both limbs to remain immersed in the liquid.]

But if the sensorial power has in this manner been increased, the powers of motion have also shared in the process. When separated from the central part of the system, motor nerves are always found to acquire a higher degree of excitability; a fact which may easily be demonstrated by the following experiment:—After selecting a subject in which the spinal cord has not been interfered with, one of the posterior limbs is amputated; that is to say, both muscles, vessels, ligaments, and all other tissues are divided, excepting only the sciatic nerve: the galvanic stimulus is then applied, and the degree of intensity required to act upon the muscular element is measured by means of a graduated apparatus. When this has been done, the amputated limb is completely separated from the trunk, by dividing the sciatic nerve, which alone connects it with the body; and galvanism being a second time brought to bear upon it, contractions are excited by currents infinitely less powerful than in the first instance. It will also be found, in making this experiment, that as long as the nerve remains intact, the effect takes place at the moment when the circuit is closed; but that after dividing it, contractions are produced both in opening and in closing the circuit, a difference which can only be attributed to the physiological modifications arising from the operation.

[M. Bernard now performs this experiment upon a large frog; and the above-mentioned particulars having been ascertained, he thus proceeds:—]

When motor nerves have been divided, their excitability diminishes in the first place, but rapidly rises to its former level, and goes beyond it; the experiments which prove this to be the case, shall on a future occasion, be performed in your presence; but, for the time being, it is quite sufficient for our purpose to show that both sensitive and motor nerves momentarily acquire unusual power through this operation, and are in consequence more readily excited by external agents: in this state, medicaments and poisons are also found to operate more speedily upon them; if, for instance, a few drops of a weak solution of strychnia are given to an animal after dividing its spinal cord, convulsions take place in the parts which lie below the wound, but not in those which are situated above it. Professor Fouquier, whose interesting remarks on paraplegia have already been alluded to, had equally noticed this fact; he states that, after administering strychnia in small doses to his patients, he observed convulsions in the lower limbs, the upper extremities remaining, in the meantime, unaffected by the presence of this agent.

The superabundant activity which follows the division of a nerve progressively increases, till a culminating point has been attained; from this moment it subsides by degrees, and totally disappears at last. When the disorganisation of the nervous element has altogether destroyed its usual properties, a similar process begins in the muscles, formerly placed under its influence. The researches of M. Faivre on this point have shown that muscles removed from the body grow more sensible to galvanic action when this stimulant has lost all power on the corresponding nerves. In short, all tissues exhibit a higher degree of activity when deprived of nervous influence; the nerves, in fact, do not befriend in all cases the vital powers, but frequently operate upon them as checks.

The intensity with which the various functions of life are carried on depends, therefore, in a great measure, upon the state of the nervous system: nor is this all: for in animals in which the spinal cord has been divided, we meet with results still more inexplicable, and which approach still closer to the phenomena of disease. The voluntary power of motion having been destroyed by this operation, it seems quite natural to suppose that reflex movements can only be produced by acting upon those parts which lie in communication with the motor nerves, by which the impressions are reflected; that the parts situate above the wound must be excited in order to produce reflex convulsions in the upper extremities, and *vice versâ*: but, strange to say, this is not always the case; when this experiment is tried several hours after the spinal axis has been divided, the exaggeration of sensibility below the injured point is such, that violent convulsions are actually provoked in the lower extremities by acting upon the upper limbs! The frog which was placed before you at the commencement of the Lecture, and underwent the operation a few days ago, is a proper subject for the demonstration of this property. [The experiment is performed before the class, and succeeds.] We need hardly state that Mammals exhibit these singular phenomena as well as Batracians; but we never meet with similar results when the spinal cord is perfectly sound. According to the notions which prevail upon this subject, the posterior limbs ought not to be set in motion when the parts acted upon do not lie in communication with the corresponding motor nerves; but how, in such cases, is the communication established? Not through the spinal cord, of course; most probably the sympathetic nerve, which remains entire, is the channel through which impressions are then transmitted.

There exist in the records of Science certain cases which it would be altogether impossible to explain if this hypothesis were rejected. In Magendie's *Journal de Physiologie* we meet with the history of a patient labouring under a disease of the spinal cord, who was, nevertheless, able to walk, although with great difficulty, a few days before he died. On making the autopsy, the spinal cord was found to be completely disorganised, and in a semi-fluid state, on a definite point; a small tract of medullary substance alone remained to connect its two separate portions, nor could this disorder be traced to the usual effects of decomposition, for the remaining parts of the spinal axis were perfectly sound. All communication would therefore seem to have been intercepted between the upper half of the nervous system and the lower extremities; yet we find that the powers of voluntary motion still existed in the patient shortly before death. How is this apparent contradiction to be accounted for?

The sympathetic nerve obeys the same laws as the cerebro-spinal system, with reference to the augmentation of its powers when it has been divided. When the solar plexus is irritated, no contractions are produced in the locomotive organs in sound animals; but let the nervous system of organic life be placed in a condition similar to that which has just been described, and its excitability increases to such a degree that convulsions are produced over all the body by merely touching the semi-lunar ganglia. These effects are observed, for instance, when the tenth pair has been divided—an operation which exerts a remarkable influence over the sympathetic nerve; the properties which it thus acquires are foreign to all that we know of the physiological states. These phenomena have attracted the notice of a few observers; but much remains to be done in this respect. M. Brown-Séquard, for instance, after having paralysed the hinder extremities of guinea-pigs, by dividing the spinal cord, has succeeded in creating general convulsions in which the paralysed limbs participate, as well as the sound ones, by merely stopping the air-passages, or otherwise producing asphyxia. The ingenious author of this experiment believes these convulsions to be occasioned by the superabundance of carbonic acid in the blood; but when the animals are allowed to die from hæmorrhage, a similar result is obtained, as I myself have been able to ascertain. Now, in this case, no accumulation of carbonic acid has taken place in the blood; and the respiratory functions do not appear to be connected with these singular manifestations, which must, in all probability, be referred to a peculiar state of the nerves which preside over organic life.

(a) It is of course fully understood, that the unilateral section of the spinal cord, and similar operations, increase the amount of sensibility in the injured parts, without suppressing consciousness in the subject.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—The following gentlemen will be balloted for as Fellows on Tuesday evening next, February 12. The ballot will be opened at half-past seven o'clock, and will close at half-past eight precisely:—George W. Callender, William James Clarke, William Henry Holman, William Scott, and Armstrong Todd.

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ORIGINAL COMMUNICATIONS.

CASE OF

GUNSHOT WOUND OF THE LUNG.

By ROBERT SIM, M.D.

I BEG to send you a brief report of a case of gunshot wound of the left lung, which has terminated in recovery, after hepatisation of both lobes, and profuse suppuration,—the bullet, a full-sized rifle one, being lodged in the thorax.

My object in sending you this report is, not that such cases are absolutely rare, but that they are always of some interest, and also because they are too often looked on as hopeless, and the least care is consequently bestowed on the very cases where the most is urgently required. Such happened in the present instance.

The subject of this communication, a youth of nineteen, is one of the British Brigade of Garibaldians, and was wounded before Capua on October 19. He was taken to the Hospital at Santa Maria, where he was, fortunately, so far, left for a time to the *vis medicatrix Naturæ*, or subjected to a trifling treatment only. Bleeding, strange to say, was not resorted to, the case being, doubtless, considered as too desperate to benefited by the further loss of blood.

The patient was very justly reported as being "feared mortally" wounded. His wound, however, had never been properly examined. He lay at Santa Maria till November 11, when an English lady had him brought into her own house in Naples, in opposition to the orders of the Italian Surgeon who had been in charge. To have left him where he was, and in the condition in which he was, would have been to leave him to die; as the Hospital was being broken up, and the attendance, never good, was becoming less efficient every day. We therefore considered that we were justified in removing him, even at the risk of aggravating his condition for a time. Fortunately, no evil result followed his removal. I had little hope of his recovery when I concurred in the opinion that he should be brought in.

The bullet entered the chest between the fourth and fifth ribs, in the axilla, at the point where the latissimus dorsi forms its posterior boundary. I cannot say what course the missile took after it penetrated the lung, as I did not see the patient till November 10, when it was impossible for me to do more than satisfy myself of the firmness of the pleuro-pulmonary adhesions to the intercostal space. Of course I have no idea where the bullet is now lodged, but when the resolution is as complete in the lower lobe as it is in the upper, it may be possible, by a careful examination, to discover its position. I intend to furnish the patient with a note to Piorry when he leaves for England. I believe him to be, in spite of his many crotchets, fitter than any other man to solve a problem in minute percussion and auscultation.

The ribs were not injured, nor was the right lung.

On taking charge of the case I had simply to treat for traumatic pneumonitis accompanied by profuse suppuration of the lung. The pleura had not been implicated in the inflammation beyond the edges of the wound. There was a great flow of sero-sanguinolent fetid pus from the wound continually, and from the mouth frequently. The fever was high; the pulse hard and jerking—more like the double pulse of incipient typhoid than that of suppurative fever. The appetite was keen withal, and the thirst ardent. A moderate amount of solid food was allowed, with beef-tea and soups *ad libitum*, as I am one of those who believe that the best mode of preventing pyæmia is to keep up the whole system to the highest point by means of easily-assimilable nutriment, while the nervous and circulatory systems are controlled by suitable therapeutic agents.

The treatment pursued in this case consisted in the administration of quinine and antimony in such doses as to obtain the hyposthenic action of both. The result was most satisfactory. About forty grains of the disulphate of quinine, with three grains of tartar emetic, were given daily, in divided doses, for the first few days. Dover's powder and extract of henbane, in full doses, were also given at the same time to allay the coughing. After the first week antimonial powder was sometimes substituted, in larger doses, for the tartar emetic.

These medicines were continued uninterruptedly, but in smaller doses, till December 1. The pulsations fell, during the first twelve hours, from 130 to 108, and never again rose much above that number. They subsequently fell to 90 and 80, but the least motion, or attempt at speaking, even in a whisper, raised them instantly to above 100. The change in the character of the pulse was more striking than the change in its frequency. It became steady, soft, and full. The pus also rapidly diminished in quantity, and altered in quality. Sometimes, during the dressing, when coughing came on, jets of air escaped with the pus from the wound, showing the communication between it and the bronchial tubes. On December 1 the bowels rebelled against the quinine and antimony. Decoction of bark and sulphuric acid were then substituted. In a few days all irritation had ceased The patient continued to improve steadily, and began to take cod-liver oil about the middle of December. Under its use he gains flesh rapidly, and when the weather is fine he takes a little exercise out of doors.

During the first fortnight, at three different times, the whole of the affected side, from the spine to the sternum, was painted with a strong solution of iodine. It acted very efficiently as a blister. The resolution of the upper part of the lung began about the end of November. The *râle de retone* is now audible over the whole of the lower part, and the resolution is going on rapidly.

The wound was cicatrised by the middle of December, but very small quantities of pus are coughed up now and then. This becomes less and less, and days elapse sometimes without any purulent appearance.

The left side is so little contracted as to require minute observation to notice it.

Remark.—Before the resolution of the lung began, the heart was so firmly pressed against the ribs that the auricular, as well as ventricular contractions were plainly visible in the intercostal spaces.

Naples.

AN EXPERIMENTAL INQUIRY INTO THE VALUE OF INCISION OF THE CILIARY MUSCLE,

IN THE TREATMENT OF CERTAIN DISEASES OF THE EYE AND DISORDERS OF ITS ACCOMMODATION.

By JAMES VOSE SOLOMON, F.R.C.S.

Surgeon to the Birmingham and Midland Eye Institution.

(Continued from page 85.)

Case 6.—Congenital Myopia—Intra-ocular Myotomy—Reading Distance doubled: Persons recognised at Forty Yards.

Ann C., seven years of age, reads brevier type with distinctness at five inches; recognises her mother's features at five yards. The eyes are clear and of medium size, cornea are not conical or unduly prominent. The pupils are active, not dilated.

Intra-ocular myotomy was performed on June 22, 1860, on both eyes. In consequence of the chloroform not having entirely abolished sensation, the child started when the left muscle was cut, and the iris prolapsed through the external wound. It was reduced, but was again pressed out in the vomiting which followed the chloroform, and a permanent coloboma iridis has resulted. The child was an out-patient.

On July 17, brevier type was read at twelve inches with distinctness, and on the 23rd of the same month, she had attained distinct vision of features at sixteen yards, that is, the focus was more than trebled.

On October 23, 1860, the child could read small pica at eighteen inches, and recognise her friends at forty yards. The vision of the eye in which the coloboma exists is not so good as that of its fellow.

February 5.—Read with the right eye small pica at eighteen inches, with the left at thirteen.

The presence of a central opacity of the cornea diminishes, but does not nullify, the results of intra-ocular myotomy.

Case 7.—Myopia of the right Eye only—Central Opacity of the Cornea—Operation—Relief.

James J., 62, a gun-percussioner, has been short-sighted

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in his right eye from infancy. The range in the left is normal. The corneæ are not unduly prominent; in the centre of each is an opacity The anterior chambers are small; the irides are blue; the pupils are not dilated. He reads small pica, No. 1, leaded, at ten inches; cannot recognise persons across the street, unless he is very well acquainted with them. On May 26, 1860, I made a transverse incision into the fibres of the ciliary muscle. The chamber became filled with blood, which was easily removed by the passing of one of Anel's small probes in the direction of the incision in the muscle. No reaction followed the operation.

June 5th.—Can tell the time of day by a church-clock, at a distance of twenty yards, and the features of persons with whom he is familiar, at four or five yards further than before the operation. He can recognise the features of those with whom he is only slightly acquainted when they are on the other side of the street. No further improvement has taken place since this date.

Note on that Form of Myopia in which the Adjustment of the Eye for Reading is normal, but the distinct Vision of Human Features is limited to One, Two, or Three Yards.

Having ascertained that in ordinary cases of myopia, the accommodation for reading and for distant vision was increased, it became a matter of interest to determine whether the operation would prove of use in instances where the adjustment for reading is normal, but the power of distinguishing features is limited to a distance of one, two, or three yards. Some of the patients who have come under my notice have referred the commencement of this disorder to childhood, others to the adolescent period. In these respects it presents no points of difference to ordinary myopia. I have traced the defect to causes of a depressing nature, such as fever and excessive grief. It is curious that the patient should be blind to his intimate friends at three yards, yet able to play at cricket and rackets. The ball is seen, but its outline is diffused—shaded off into the atmosphere. The same remark applies to shooting. I have now a gentleman under my care who "can shoot a hare as far off as a gun will carry," but who does not see features distinctly beyond four yards.

Case 8.—Miss A. D., aged 15, came under my care on July 3, 1860. Features were distinguished at three yards. Minion type was read with comfort at eighteen inches. The eyes are blue and moderately full in all their dimensions. The movements of the pupils and their diameters are normal. The vision was good up to four years ago, when she had an attack of typhoid fever, which left the accommodation of the eye as described above. No relations suffer in the same way.

Treatment.—Iron and quinine was administered for a fortnight, and on July 17 I performed intra-ocular myotomy on the right eye.

August 10.—Features were distinct at a little more than seven yards, and on October 12, at nine yards. In the interval of the operation and this last date, the patient's health became much disturbed. She was dyspeptic, debilitated, and nervous. The vision of the left (unoperated) eye was reported so early as August 10, as being clearer, indicating that an improvement had taken place in its power of adjustment. On October 26, when the operated eye was closed, the eyes of another person were distinctly seen at four yards. On this day intra-ocular myotomy was performed; and on November 6,—a lapse of eleven days—a gain of three yards was obtained; and when both eyes were used the adjustment for distance was much greater. On November 16, the atmosphere being rather foggy, with both eyes open, a woman's features were seen with distinctness at eighteen yards. In testing the power of the eye to distinguish features, it will be found that the eyes are more difficult of definition than the mouth, and that the nose is more readily seen than the other features.

December 11.—Features were clear at twenty-five yards.

An important practical fact in this case, is that the increase of accommodation was very limited, until the *two* eyes had been submitted to the treatment. It has been already remarked that a single operation is sometimes sufficient, as in Case 2, to effect a cure.

The preceding eight cases have been selected from others, as they illustrate the chief points of practical importance which have been elicited from the special plan of treatment which I have followed in cases of short sight (myopia), whether simple, or complicated by derangement of other tissues than those immediately concerned in the mechanism of adjustment. They exhibit the highest and the lowest degree of improvement which has resulted, and indicate that the increase of the power of accommodation is generally progressive, so that the cure of short sight, without spectacles, need no longer be considered as chimerical. In the details of the cases a very important fact has been omitted, which is, that without a single exception, the power of accommodation to objects placed between the nearest and furthest point of distinct vision has been normal. In other words, the focus of the eye has never been unalterably fixed at a particular distance. In Case 5, the accommodation was perfect at all distances, from an inch and a-half to twenty-seven yards.

Case 9.—*Case of Near Sight in which the Ciliary Muscular Circle was cut asunder (Hancock's Operation) without Improvement to the Accommodation of the Eye—Cure of Asthenic Corneo-iritis which had resisted Medical Treatment.*

I was requested on the 19th of September, 1860, to visit a gentleman at Kenilworth by his Surgeon, Mr. G. F. Bodington. The patient was of literary habits; naturally of low general power; 45 years of age; short-sighted in the left, and blind in the right eye from childhood.

The *left* presented an opaque, spreading ulceration of the cornea, which was on the eve of bursting in its centre, and threatened to extend over the centre of the pupil. In the anterior chamber was a moderate quantity of pus. The iris was inflamed, slightly under the influence of atropine, and its natural hazel colour changed to orange; pupil circular. The conjunctiva was inflamed, and where not compressed by the upper lid was tumid, flabby, and raised considerably above the level of the cornea by exudation into its subareolar tissue (chemosis). The integument of the upper lid was œdematous. Ocular tension not excessive. A dull aching pain in the globe and brow. No intolerance of light; no useful vision. The general symptoms were those of debility, without constitutional irritation; the ophthalmic disease corresponded to the catarrho-rheumatic ophthalmia of systematic writers. It commenced with ulceration of the cornea, and had gradually attained the state described, in spite of the careful and well-directed treatment which Mr. Bodington had employed. In consultation it was agreed that, as Medical treatment had failed to arrest the disease, the ciliary muscle should be cut asunder, to prevent, if possible, the complete penetration of the cornea, the occurrence of synechia, and other serious complications, if not of blindness itself.

The incision was made at the outer and lower part of the cornea at a right angle with the margin of that membrane, and through the thickest part of the chemosed conjunctiva. The eye rapidly recovered; but the accommodation continued the same as before the occurrence of the ophthalmia, viz., distinct vision of book type at four inches, and of features at four yards. When the ciliary muscle was paralysed by atropine the adjustment was increased to an extent sufficient to attract the attention of the patient.

(To be continued.)

THE INSANE OF THE STATE OF NEW YORK.—The *American Medical Times* recently published some strictures upon the condition of the insane in Bethlem. In a recent number (No. 2 for 1861) of that journal there is a letter from Dr. Bradford, from which it would seem that the provision for the insane in New York is very meagre and unsatisfactory. He says that, according to the census of 1855, there were 4455 insane in the State of New York, while public provision was only made for 707. "These figures show that 3748 insane persons are left with no other provision for their well-being than the county poor-houses and private care. All who have any knowledge of the condition of the insane in our county poor-houses, must be deeply impressed with the necessity of better provision for their welfare. Let anyone read the Report of the Select Committee of our State Senate in 1857, and he cannot but feel that common humanity, as well as every consideration of right and decency, should impel us to do something effectual for the better care of this unfortunate class of our fellow-beings." As the State has declined to increase its expenditure for the care and support of these unfortunates, he suggests that the whole matter should be inquired into by a Commission.

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REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

CONDUCTED BY

JONATHAN HUTCHINSON,

Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital,

AND BY

J. HUGHLINGS JACKSON, M.D.

UNIVERSITY COLLEGE HOSPITAL.

OVARIOTOMY—DEATH ON THE FOURTH DAY.

(Under the care of Mr. ERICHSEN.)

H. F., aged 63, was admitted in December, 1860. She had been the subject of an ovarian tumour for some years; latterly it had increased in size very rapidly, and produced such distension of the digestive organs and other symptoms of great uneasiness, that she was most anxious to undergo any operative measure that would hold out a chance of relief.

On December 24, Mr. Erichsen performed ovariotomy upon her, and both ovaries were found enlarged; the right was colloid in its character, and the left multilocular. An incision was made under chloroform from the umbilicus to the pubes. After dividing the linea alba, Mr. Erichsen found strong old adhesions between the right ovary (which lay in front of the other) and the abdominal walls. These could not be broken down with the hand, but required to be cut and separated by means of a probe-pointed bistoury. After this proceeding the tumour was readily turned out, and was found to be about the size of a small melon. The tumour connected with the left ovary (lying behind that first removed) was likewise extensively adherent, but to the intestines and omentum. These adhesions were, however, carefully and cautiously broken through with the hand. Being of large size, the second tumour was emptied of its contents as far as was practicable, and then drawn forwards. The pedicles were then exposed, tied, and divided. That of the left ovarian tumour was round and thick, while that of the right was narrow and flat. Both were transfixed by a nævus needle, carrying a double whip-cord ligature, and tied in two sections. The wound was closed by means of sharp silver-pointed probes, perforating the peritoneum; four or five of these were used, and then twisted sutures. The pedicles and their ligatures were brought well out of the lower angle of the wound, and attached to the last pin, which was an iron one, and care was taken to bring the constricted part well out of the peritoneal cavity.

The patient was treated with opium and ice, with brandy and champagne, but she was affected with almost unceasing sickness. The opium increased it very much, but the ice and champagne to some extent stayed it. In consequence of this distressing symptom she became very weak, and died from exhaustion on the 28th, four days after the operation.

THE MIDDLESEX HOSPITAL.

OVARIOTOMY — DEATH FROM HÆMORRHAGE AND SPERITONITIS.

(Under the care of Mr. NUNN.)

Hannah E., aged 20, admitted July 3, under Dr. Goodfellow, with ovarian dropsy; a well formed maid-servant; abdomen about the size of full period of pregnancy, or rather larger. Enlargement commenced twelve months since, the increase being attended with pain, sometimes severe, in the abdomen and down the thighs; head-ache has been frequently troublesome, and occasionally there has been vomiting.

General health up to the apparent commencement of the disease, good, with the exception of suppression of the menstrual function at various periods; for the past three months the menstruation has been regular.

On July 30, at 2 p.m., Mr. Nunn performed ovariotomy, the patient being under chloroform. The incision in the linea alba was five inches in length. After exposure the cyst was tapped with Hutchinson's large trochar; three to four gallons of clear yellow fluid being evacuated (exact quantity not ascertainable, in consequence of copious leakage by the side of the canula). The cyst was very generally adherent, but especially towards the right side, and also to the great omentum. After drawing out the cyst, the adhesions having been broken through with the fingers, the pedicle was secured by a (Calliper's) clamp, and the wound in the abdominal parietes closed up to it with iron-wire sutures. No considerable hæmorrhage into the cavity of the abdomen was detected during the operation. At 8·45 p.m. pain in lower part of abdomen complained of, and nothing had been retained on the stomach; pulse 108, soft. Midnight,—pulse 136; vomiting on taking food or medicine; pain shifted from lower part of abdomen to back and shoulder of right side; tongue moist.

31st.—Sickness continues, slept fairly during the night; pulse 148, compressible; tongue moist.

August 1.—Sickness continues; pulse 138, rather hard; pain in shoulder ceased, but there is pain in lower part of abdomen of a dull, aching character; a suture immediately above clamp removed, but no escape of fluid.

2nd.—No sleep during night, vomiting continues; pulse 150, tongue moist, pain remains, countenance anxious; peritonitis evident.

3rd.—Died at 7 a.m., perfectly conscious up to the last.

Post-mortem examination at three p.m., August 4, showed peritonitis most evident between liver and diaphragm; about forty ounces of bloody serum in the peritoneal cavity mixed with blood coagula. Hæmorrhage clots also lay along the ascending and descending colon. Liver weighed 3 lbs. 2oz.; left kidney 4½ oz.; right kidney 2½ oz., right ureter much dilated, mesenteric glands enlarged.

From the appearances presented at the post-mortem examination Mr. Nunn was led to conclude that hæmorrhage had taken place not only from the surface of the broad adhesions but also from an omental artery.

Note.—Morphia was administered by injection under the skin of the arm, beef-tea and port wine by the bowel, in addition to all other means which the given details of the case itself would suggest.

THE LONDON HOSPITAL.

CASE OF OVARIAN DROPSY, TREATED BY THE INJECTION OF IODINE—SUBSEQUENT EVACUATION INTO THE RECTUM.

(Under the care of Dr. DAVIES and Mr. CURLING.)
[From Notes by Mr. W. G. PAYNE.]

Mrs. W., aged 25, was originally admitted under care, at the London Hospital, in July 1858. She was of fair complexion and well-formed. Her disease, which was ovarian dropsy, was believed to have commenced in the summer of 1856. She had previously borne one child. The first ovarian enlargement was mistaken for pregnancy, menstruation being for the time suspended. The enlargement of the cyst was gradual, and at the time of her admission, two years from its commencement, the distension was somewhat more than that of the full period of pregnancy. Her health was a good deal undermined.

July 20, 1858.—Having been in the Hospital a few days, paracentesis was performed, and fifteen pints of a greenish-yellow fluid were withdrawn. After the tapping the topical application of iodine was tried and tonics were given. She left the Hospital in ten days.

Having remained at home about nine months, Mrs. W. was admitted for a second time in April 12, 1859, being now much larger than ever. Paracentesis was performed on the 14th, and thirty-five pints of brown fluid were withdrawn; the fluid on this occasion was thicker than on the previous one, but not much so. She recovered well from the operation, the cyst, however, commencing to refill almost immediately. She left the Hospital on the 28th.

After the second tapping, her husband, who had been in India, returned home; and as shortly afterwards the catamenia ceased, she supposed herself pregnant. Her abdomen enlarged very considerably. While in this condi-

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tion she had a fall and struck her abdomen on a plank, after which she became suddenly very faint and ill. The accident happened in the country, and the Surgeon who was called in performed paracentesis and withdrew thirty-nine pints of fluid.

During July the woman was again in the London Hospital, but she declined on this occasion to submit to another tapping. In August she was re-admitted, her condition having become unbearable. A fourth paracentesis was performed, and thirty-eight pints of dark brown fluid were removed. After this tapping she remained in a very low state for some time, and left the Hospital at her own request, apparently about to sink under her disease. She remained at home six weeks, being confined to bed the whole time, but having been somewhat improved in general strength.

August 27, re-admitted. She was now in a very feeble state, unable to stand, her legs swollen and painful, countenance swollen and anxious. Face thin and drawn. Her abdomen was very large indeed. It was now determined in consultation that treatment by the injection of tincture of iodine should be tried. On October 18 Mr. Curling accordingly tapped the cyst for the fifth time. Forty-five pints of thick brown fluid having been withdrawn, and the cyst having apparently been emptied, a quantity of the pharmacopœial tincture of iodine was injected. After the injection she passed a good night, and did not suffer very much pain. On the next day she said she could taste the iodine. During the following week the urine was frequently examined, and found to contain iodine. The cyst rapidly re-filled, and on the 20th she was almost as large as ever. On the 27th Mr. Curling again performed paracentesis, removing twenty-seven pints. A solution consisting of a drachm of iodine, a drachm and a-half of the iodide of potassium, and three ounces of water, was injected, and allowed to remain in. About eight hours after the injection she complained of a burning pain in the lower part of the abdomen, but no severe symptoms followed. During the next fortnight she rather improved in general condition, but the abdomen rapidly increased. On the 17th, whilst sitting on the close stool, she felt what she described as "something hard pressing into the rectum," and the sensation was followed by a snap and a gush of fluid. Twenty-seven pints of thick, light-coloured fluid, like gruel, escaped per anum. She became faint, and it was necessary to give brandy, after which she quickly rallied. On the day following about a pint and a-half were passed. On the 20th about a pint escaped, and during the following week the quantity of discharge varied from one to two pints daily. She improved in health slightly, but towards the middle of December a tumour was discovered in the region of the left ovary. From this time she gradually sank, the discharge per anum steadily continuing. Death took place on December 25, eighteen months after the first tapping, and three years and a-half from the date of the commencement of her disease. Unfortunately no post-mortem examination was permitted.

GUY'S HOSPITAL.

OVARIOTOMY—DEATH FROM PERITONITIS.

(Under the care of Dr. BRAXTON HICKS and Mr. BRYANT.)
[Reported by Mr. HILTON FAGGE.]

Mary E., aged 30, was admitted under Dr. Braxton Hicks on November 7, 1860. She was a woman of good general health. She first menstruated at the age of twelve years, and soon afterwards the flow continued regularly. It was generally rather scanty. She had always been subject to occasional leucorrhœa. She was married ten years before, but had never been pregnant. Three years ago she noticed that her abdomen was enlarged, chiefly on the left side, and for some time before she had had pain in that side when walking. She also had suffered pain in both groins, and lately in the course of the external cutaneous nerve of the left leg. A year ago she had partial prolapse of the uterus. She was in the Hospital eleven weeks before her last admission, and from that time had been getting larger. On admission her state was as follows:—The abdomen was filled by a large tumour, being dull in front and tympanitic in the loin. The tumour was most prominent on the right side. On the whole of the right side fluctuation was very distinct; on the left side it was more local, and gave the idea of small, thick-walled cysts. She was about twice the size she was when in the Hospital before, eleven weeks ago, the increase being chiefly due to the enlargement of the cyst at the base, pushing the more solid portions upwards underneath the left ribs, against which they pressed, giving much immobility to the growth; there was also indistinct fluctuation in the more solid portions. The veins on the surface of the abdomen were not enlarged; the os and cervix uteri were natural.

December 5.—She was in about the same condition, except that the size of the abdomen was greater. It having been explained to her that an operation (ovariotomy) was the only hope of permanent cure, she wished that the operation should be performed. She was still in very good health. She was, therefore, removed to a warm room (temperature of 65°).

Mr. Bryant commenced his operation by an incision an inch below the umbilicus, along the tumour, in the mesian line, cutting through much fat. The large cyst was then tapped with a large trocar and canula, and pale yellow fluid was drawn off. It was then found that the upper part of the tumour was free. The incision was then enlarged as high as the umbilicus, and below to within an inch of the pubis. The smaller cysts were then tapped through the other, and broken down with the finger. The fluid in some of them was viscid, and in others opaque. A cord being fixed in the first cyst, the whole tumour was drawn out with some difficulty, and found to have a broad pedicle, and to be connected with the bladder. The band of adhesion (with the uterus) was first tied; and then severed. The pedicle was then tied in two portions after being fixed by the clamp; one portion contained the Fallopian tube, the other the part adherent to the bladder. The tumour was then cut off and the clamp removed. A large hare-lip needle was introduced transversly through the skin and fat (including the peritoneum), and the base of the pedicle, which was left in the wound; another needle was placed above this, and three or four wire sutures higher up. A pad of lint and strapping was placed over the upper part of the wound, the lower part being only lightly covered. The operation lasted one hour and a-quarter. Two ounces of chloroform were administered.

After the operation two grains of opium were given, and ordered to be repeated every three hours. The pulse was quite natural after the operation.

6 p.m.—The urine was drawn off. It was very clear. Later in the day she had slight retching, and complained of pain in the abdomen; pulse rose to about 100; slight oozing from the wound.

10 p.m.—Milk and tea; to continue the opium.

6th.—She did not sleep last night; feels comfortable; tongue pale and clean; abdomen tender; pulse, 122; no sickness; ordered to take arrow-root made with water.

7th.—She is not so well to-day, and has had a great deal of sickness this morning, but had a comfortable night; the abdomen was tympanitic, with considerable fulness over the stomach and colon; the wound was dressed to-day, and found to be adhering at its upper part; the slough was ordered to be covered with chlorinated lotion.

1 p.m.—Skin moist and clammy; she is still sick (has had twenty grains of opium since the operation); ten drops of chloric ether every four hours.

3 p.m.—She vomited the chloric ether; she was ordered ten minims of tincture of opium and twenty of sal volatile in peppermint-water ever four hours; a tablespoonful of brandy occasionally.

6 p.m.—Enema of warm water.

10 p.m.—She vomited the medicine and brandy; the injection has not returned; she has considerable hiccup; her abdomen is rather tender, and is much distended; the pulse has been gradually rising in frequency, and is now 138, and very feeble; tongue pale and furred; aspect without anxiety; three minims of hydrocyanic acid were given every four hours.

8th.—She had a tolerable night; no more sickness; slept a good deal; her pulse was 148, and very feeble; her tongue was pale, with a tendency to be dry; her abdomen was less distended; she had a little beef-tea, which, however, made her feel sick.

She gradually sank during the afternoon of this day, became comatose, and died in convulsions at six p.m., about seventy-eight hours after the operation.

Autopsy.—Acute general peritonitis; coils of intestine adherent, and several ounces of a dirty-coloured fluid. The

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right corner of the uterus was tilted forward, and approached close to the opening in the abdominal walls; but, owing to the sloughing and decomposition, it tore quite away from the peduncle and the threads which held it. It was difficult to say how far this tendency to slough had occurred during life, and been the cause of the peritonitis. The uterus appeared natural, and not otherwise than mentioned in an unnatural position. The bladder likewise, and, as far as could be told, there appeared to have been no tearing of any part from loosening of adhesions.

SAMARITAN HOSPITAL.

COMPOUND OVARIAN CYST—OVARIOTOMY—RECOVERY.

(Under the care of Mr. SPENCER WELLS.)

E. G., aged 54, married, the mother of ten children, was first admitted under Mr. Spencer Wells in October, 1859, having been sent as a case suitable for ovariotomy by Mr. Fuller, of St. John's Wood. The abdomen was occupied by a large multilocular ovarian cyst, of only fourteen months' growth. She was not much affected in general health by the tumour, but had recently begun to suffer from severe dyspnœa and repeated vomiting from the increasing abdominal distension. On October 18 she was tapped, and eleven pounds of viscid albuminous fluid were removed from a central cyst, surrounded by other adhering secondary cysts. She did not suffer, and went home, but the cyst soon refilled.

She was re-admitted and tapped a second time on December 1, having preferred the palliative to the radical treatment, after the risk of the latter had been fairly put before her.

After her return home she began to fill rapidly, and to suffer from dyspnœa, dyspepsia, etc., so that she became anxious to have the tumour removed, and was re-admitted for the purpose on January 17, 1861. On the 21st, the circumference of the abdomen at the umbilical level was 40 inches, the distance from symphisis pubis to ensiform cartilage 18½ inches.

The Operation was performed on the 22nd. Dr. Anstie administered chloroform. An incision large enough to admit the hand was first made down the linea alba, commencing an inch below the umbilicus, exposing the cyst. The whole of the anterior wall of the cyst was closely adherent to the parietes, but the adhesions were easily separated by the hand. The largest cyst was then emptied, and held forward, but the remainder could not be removed without enlarging the incision, which was accordingly carried upwards to two inches above the umbilicus. The whole mass was then withdrawn, and a large piece of omentum adhering to the upper part of the tumour was separated. The peduncle was secured in the manner Mr. Wells has recently adopted, and the wound closed by harelip pins and superficial sutures. There was considerable oozing of blood from the separated adhesions, and two ligatures were required.

There is little to report as to the progress of the case after operation, as recovery was uninterrupted by a single bad symptom. The only medicine given was 20 drops of laudanum by enema, and this only twice. The bowels acted on the evening of the day of operation, and again on the fifth day, and daily afterwards. The pulse was generally about 90, and only once reached 110. The harelip pins were removed forty-eight hours after operation; the superficial sutures were left till the eighth day. The ligature on the peduncle with the strangulated stump (which had been fixed outside the wound) came away on the ninth day.

February 6.—The woman is now sitting up in bed, the wound healed, and she may be said to be convalescent. Her fifty-fifth birthday falls next month.

Remarks.—The age of this patient, the extensive adhesions, and the rapid growth of the tumour, are all circumstances thought to be unfavourable to ovariotomy; yet this patient says that she slept better on the night of the operation than she had done some weeks before, and that she has felt much more ill and suffered more pain after her confinements than she had done after ovariotomy. It was a case in which speedy death must have followed had she been let alone, and in which tapping could have given very little relief, while the injection of iodine was, of course, quite out of the question. This is the thirteenth case Mr. Wells has had in the Samaritan Hospital, and the result has been only four deaths to nine recoveries.

ST. BARTHOLOMEW'S HOSPITAL.

INGUINAL HERNIA PARTIALLY REDUCED *EN MASSE*—OPERATION—DEATH.

(Under the care of Mr. STANLEY.)

Our ideas as to the actual condition of things in what is called reduction *en masse* of a strangulated hernia have been much simplified by an excellent report on this subject from the pen of Mr. Birkett, in a recent volume of the *Medico-Chirurgical Transactions*. Mr. Birkett demonstrates that the return of a hernia with its sac into the abdominal cavity is, from anatomical considerations, very unlikely to occur, and proves by reference to all the recorded instances of the accident under consideration that in the majority of them it certainly had not taken place. In most of the latter the reporters of the cases expressly state that an empty sac was found in its ordinary site. When we recollect that in most of the instances of supposed reduction *en masse* the hernia was an old-standing one, and the sac therefore adherent to the scrotal tissues, and often of large size, the idea of its bodily return into the abdomen certainly becomes difficult to realise. What does really happen is supposed to be this:—An inguinal hernia with a firm neck to its sac is subjected to forcible pressure; by the force employed the neck of the sac is loosened and driven somewhat upwards, and then a dilatation takes place between it and the margin of the internal ring. Thus, a pouch is formed, which lies beneath the parietal peritoneum, and is bound down by it. Into this pouch a portion or the whole of the contents of the hernia passes, and the sac now has two compartments,—one within the abdominal cavity, and the other in the usual position in the inguinal canal. It is quite possible that there may have been no displacement of the body of the original sac, but merely a dilatation just below its displaced neck. In the majority of cases, however, a reduction *en masse*, according to Mr. Birkett's notion of it, differs from that of former writers in being partial instead of complete; in the upper portion only the sac is returned, not the whole of it. Note, however, the extreme importance to the operator of a clear idea of the difference pointed out. If the whole sac had been returned the operator would expect to find no serous membrane whatever in the inguinal canal, but to re-encounter the exterior of that tunic bulging just within the internal ring. Instead of that, he finds usually, as facts have abundantly shown, an empty sac, in the usual position, and, having opened this, his finger passes up its interior and finds a second chamber within the abdomen, in which the bowel is still retained. To carefully draw down the sac until its displaced neck can be safely divided is the next step, and when this has been accomplished the intra-abdominal chamber may of course be emptied of its contents by further traction on the sac.

The following case appears to have been very nearly a complete reduction *en masse* according to the old definition. The entire sac had apparently been forced up, so that its lowest part was but just within the inguinal canal. On the importance of the case, as illustrating the necessity for immediate operation whenever there is a doubt as to the diagnosis of a strangulated hernia, it is needless to insist. "When in doubt, operate," is a maxim on which we have many a time heard Mr. Stanley insist, and its wisdom has rarely met with a more apposite confirmation than in the present instance.

[Reported by Mr. HERBERT EVANS, House-Surgeon.]

William B., a strong, muscular man, aged 32, was admitted at 8 a.m., on December 13. He stated that he had been the subject of a double hernia for about twenty years, for which he had always worn a double truss. He had on several occasions had a difficulty in returning the rupture. Once he had been obliged to come to the Hospital, but it was reduced without operation. The night previous to his present attack, he had gone to bed drunk, and on turning in bed, he felt something come down on the right side. He used a great deal of force in his endeavours to return it. On his admission (an hour after the extrusion) he looked pale and ill, his tongue was very dry, but his pulse was quiet. He complained of severe

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pain over the abdomen generally, and tenderness over the inguinal canal. His bowels had been opened that morning before the protrusion, and he had had no sickness. On examining the tender part, fullness rather than a swelling was felt. The man was put into a warm bath, and the taxis attempted, but without getting rid of the swelling, though with perhaps a slight diminution of it. He was then kept in bed. The pain in the abdomen rather increased, and he vomited about a pint of dark-looking fluid. About four hours after his admission Mr. Stanley saw him, and intended to operate; but on showing the case to two of his colleagues, they thought that there was no hernia, the symptoms being referable to injury done to the right testis, which was slightly tender, and that it would be better to wait. Mr. Stanley waited an hour, when as the symptoms still continued, he asked the opinions of three other of his colleagues. It was agreed that there was a hernia, and that the operation ought not to be delayed. Mr. Stanley therefore decided to operate. He made an oblique incision, commencing at the position of the external ring, and continued upwards and outwards. The external ring was exposed and found free, a more than ordinary fullness could be seen over the situation of the canal. The muscular structures constituting the anterior wall of the inguinal canal having been divided, a circumscribed swelling could be felt, but very little could be seen. At length, after some trouble, and a good deal of careful dissection, something like a sac of peritoneum was discovered. This was carefully opened and a small quantity of serous fluid spirted out; a director was introduced and the opening enlarged; a knuckle of intestine, a good deal congested, was found in it. The internal ring was made free, but the intestine would not return. The intestine went somewhere, but the fingers did not pass satisfactorily into the abdominal cavity. The intestine was now brought down again and the sac searched for. The stricture was found to be in the neck of the sac, and having been divided the intestine returned easily. There was no doubt that the man had reduced the intestine and sac together in his forcible efforts. During the evening following the operation the man slept on and off a little, had no sickness, and did not complain of any pain in the abdomen. The wound was rather sore. Later at night he had a great deal of pain in the abdomen. He was ordered a grain of opium, but the pain increased. He was very restless, there was a great deal of pain in the scrotum, with ecchymosis. The pad and bandage were taken off, fomentations ordered for the abdomen, and two grains of calomel and one of opium were given every four hours. He continued during the night very restless and in a great deal of pain in the abdomen, which was very tender to the touch. Pulse 104, not very sharp. His breathing was chiefly thoracic. He had vomited several times during the night. Mr. Stanley ordered him to continue the calomel and opium, and directed eighteen leeches to be applied to the abdomen, and the mercurial ointment to be put on the abdomen, axilla, and thighs. The leeches bled freely, and the man was much relieved, but the vomiting still continued at intervals, pulse getting feebler and more frequent.

15th.—He passed a very restless night, complained of pain in the abdomen and in the scrotum, which was much swollen, containing fluid, black looking, and was inclined to slough. He still continues the calomel and opium. His pulse was now scarcely perceptible at the wrist. He had some brandy and twenty drops of tincture of opium, and a large blister over abdomen. He grew gradually worse and worse, and died at about five o'clock, fifty-eight hours after the rupture was first observed to come down. No post-mortem examination was allowed.

GUY'S HOSPITAL.

SUPPOSED FEMORAL HERNIA—OPERATION—A CYST ONLY FOUND.

(Under the care of Mr. BRYANT.)

In the following case, although at the operation no hernial protrusion was found, yet the wisdom of the practice adopted cannot be doubted. As it was, no harm was done, and the diagnosis of the real state of the patient's ailment was cleared up. Had the operation been delayed and the tumour proved to be hernia, the delay would have been to the woman's detriment.

Sarah A., aged 46, was admitted January 21, 1861, having been sent to the Hospital for supposed strangulated hernia. She had had a tumour in the right femoral region for ten years, and had worn a truss all the time. She said that it never went up, but that she could reduce its bulk a little. About a week ago, she found that the tumour had become larger. There were, however, then no other symptoms. Her bowels were open, and she had no sickness. A few days later she applied at a Dispensary, and here taxis was freely employed in the hope of reducing the swelling. No effect was produced. She was then sent to the Hospital.

Taxis was again tried, the woman being under the influence of chloroform, but there was still no diminution of size in the tumour. Twenty-four hours later the tumour became larger and more tense; there had been no action of the bowels, and sickness appeared, but this latter symptom was not urgent, and not more than often follows the administration of chloroform. Mr. Bryant, however, determined to cut down on the tumour, and at least ascertain its real nature. He made the incisions usual in hernia, and having divided the various structures until he reached what he supposed might be the sac of a hernia, he incised the supposed stricture, but failed to find the ordinary neck of a strangulated hernia. Mr. Bryant therefore examined the tumour more carefully, and opened what, on the supposition of its being a hernia, appeared to be the sac. This was remarkably tense. On opening it, about two ounces of a clear, serous fluid escaped. Upon careful examination, it was found to be a simple cyst about the size of four walnuts. In the wall of the cyst was a piece of granular fat which might have been mistaken for omentum. A purgative was given next day. No further abdominal symptoms followed, and the woman is now convalescent.

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Medical Times and Gazette.

SATURDAY, FEBRUARY 9.

NEPHALISM.

We make no apology for presenting our readers with a short chapter of Biblical Criticism; it relates to a subject much discussed in society, respecting which members of our Profession are expected to be more than mere listeners.

It is well known that the modern advocates of total abstinence from alcoholic liquors are much more *exigeant* than the members of the original Temperance Societies were. Formerly, a member of a Temperance Society pledged himself to moderation generally, and to abstain from distilled spirits, except under Medical advice: now, moderation is denounced as being, if possible, worse than drunkenness, inasmuch as it is alleged to allure the unwary to surrender themselves by slow degrees to a vice from which there is little or no escape; and not only the moderate use, but any use, and even the very existence of fermented and distilled liquors is denounced as a crime; and the total abolition of the liquors, and of their manufacture, and of the trade in them, is clamoured for. All sorts of arguments, based on reason and experience, are brought forward in favour of this sweeping measure,—which

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it is not our purpose to enter on here, merely saying, that we admit and lament the great and wasteful misuse of these drinks by persons in health and strength; and that if, as Saint Jerome says, a man's blood is warm enough with youth, and health, and exercise, if his appetite be good and his food abundant, it were hard to call wine a necessary of life.

The Teetotallers, however, are not content with arguments from reason and experience, but they wish to enlist Scriptural authority on their side; and this does not seem easy at first sight,—for every person who has read the Bible is familiar with the history of the first miracle that Jesus did, and which has always been considered as one of the forms of His Epiphany; when, as some poet says,

"The conscious water saw its God, and blushed."

There are likewise passages speaking with commendation of wine "that maketh glad the heart of man;" and the well-known advice of St. Paul to Timothy, to "use a little wine for his stomach's sake;" and albeit the Apostle is said by the great commentator Cornelius a Lapide, to have laid stress on the word χρῶ, *i.e.*, *utere, non fruere*, implying that the wine was to be used as a medicine, and not enjoyed as a luxury; yet, moderate people of all ages have held that the whole body of Sacred Scripture not only does not forbid wine, but that it sanctions its use in the threefold capacity of a medicine for sickness—a cordial under depression and adversity—and a means of promoting social pleasure, and that kind of innocent merry-making which may be supposed to have prevailed at a wedding-feast at which the Holy Family were guests.

The plain sense of the Bible being thus adverse to the Teetotallers, they were obliged to do what other controversialists in a dilemma do, namely, to manipulate the text, and endeavour to prove that the plain sense is not the true sense. And that which they now wish us to believe is, that whenever we find wine commended in Holy Writ, it was not wine in our sense, but a mere unfermented, grape syrup; while any wine which is denounced is the true intoxicating fermented liquor.

This argument has been before the Teetotal public for some years, and has been advocated with great learning and ingenuity by Dr. F. R. Lees, author of a work on the Wines of the Bible, and of articles on the same subject in Dr. Kitto's "Cyclopædia of Biblical Literature." Now, it has been adopted by Professor Miller, of Edinburgh, in a little work called "Nephalism, the True Temperance," and we propose to give our readers the means of judging of the argument itself, and of Professor Miller's use of it. We must stop for one moment to explain that the Professor has introduced the word "Nephalism" as a Greek substitute for "total abstinence," or for the vulgar American term "Teetotallism," with the view probably of attracting that large class of devotees who despise what they can thoroughly understand.

That the grape and its juice constitute very important articles of diet in wine countries is well known. We learn from a friend who long lived in Persia, that the juice of green unripe grapes is employed much as we use lemon-juice, both as an ingredient in sherbet and cooling drinks, and as an appetising addition to food. The juice of the ripe grape is said to have been preserved, by various artifices, in an unfermented state, and used as a nourishing drink; and it, moreover, is boiled down into a thick syrup, and may be evaporated to the consistence of honey, and mixed with almonds, flour, and other substances, and be converted into cakes. Again the juice may be fermented, and made either into a natural light wine; or it may be inspissated by boiling and by addition of grape syrup, and converted into a sweet wine of the Tent and Constantia class; or, besides the boiling and fermentation, it may be mixed with various drugs and spices to add to its intoxicating virtues. This, doubtless, is the myrrhed wine of St. Mark.

Besides the produce of the grape and its varieties, there was a large class of intoxicating liquors formerly, as now, made from anything that would yield sugar; and these in the English Bible are designated by the term, "strong drink;" *sicera* in the Vulgate, σίκερα in the New Testament and Septuagint, and *sheckar* in the Hebrew. It is interesting to remark, in passing, that the Hebrew word is supposed justly to be parent of *saccharum* and *sugar*, and its Latin derivative *sicera* to be the root of our *sycer*, syder, or as we now call it, cider. The well-known passage in St. Luke, "he shall drink neither wine nor strong drink," οἶνον καὶ σίκερα οὐ μὴ πίῃ, is said to be translated by Wycliffe, "he shall not drinke wyn, ne syder,"—and in the Rheims Bible 1582, "and wine and *sicer* he shall not drink."

As to the liquids that were included under the term *sicera*, there is not the smallest possible doubt. St. Jerome, in his Epistle to Nepotianus, seems to refer to certain persons who pleaded that they might indulge in beer or mead, on the same ground that Fielding makes the Newgate Ordinary prefer punch to wine; that is to say, because it is a liquor nowhere spoken against in Scripture. But St. Jerome cuts this ground from under their feet by showing that "in the Hebrew tongue, every drink which can intoxicate is called *sicera*, whether it be that which is made out of grain, or of the juice of apples, or that which is made when the honey-comb is boiled down into a sweet but barbaric drink, or when the juice of dates is expressed, and when water is tinged of a rich colour by boiling down the fruit." All evidence shows that the date palm, the vine, the orchard, the beehive, and the cornfield, have everywhere yielded solid food, sweetmeats, and intoxicating drinks, as they do at this day. Herodotus says that the Babylonians made bread, wine, and honey from the palm. Aretæus mentions the use of beer in Egypt and Syria, and ascribes the prevalence of sore-throats to the use of it. There is no doubt but that the fresh juice of the palm was always used as a refreshing drink, the fermented juice as wine, and the honey or sugar formed by boiling it down as a pleasant confection; and that our words syrup, sherbet, and rob, like sugar and cider, came, as our race did, from an Eastern root.

Now, the argument of Dr. F. R. Lees, copied by Professor Miller, is, that whereas the Hebrew word *yayin* (the parent of *οἶνος*, *vinum* and *wine*), and the other Hebrew words which are commonly translated *οἶνος* in the Septuagint, and wine in the English, may signify other preparations of the grape juice besides fermented wine—and whereas *sicera* or *sheckar* may signify mere sweet juice, or palm honey, and not wine or toddy,—so in fixing on the meaning, whether "fermented" or "unfermented," we must be guided by collateral considerations.

The consideration which guides the Teetotal or Nephalist interpreters is summary enough, and it is this,—Wine is poison, and the drinking of wine is morally wrong; but the Supreme Being cannot sanction evil: therefore He cannot sanction the use of intoxicating wine.

By this little chain of argument, charming for its rotundity, they get rid of every obstacle. The Sacred Writer says—

"It is not for kings to drink wine,
Nor for princes, *sicera*,
Lest they drink and forget the law,
And pervert the judgment of the afflicted."

But when he goes on, and sanctions the use of wine as a boon to the wretched,—

"Give *sicera* to him that is ready to perish;
And wine unto those that be of heavy hearts;
Let him drink and forget his poverty,
And remember his misery no more,"—

the Teetotal commentator, Dr. Lees, is as ready as a practitioner at the Old Bailey. His first plea is:—Such a dictum is morally wrong, and therefore cannot be Divine; the passage therefore must be understood ironically! Or, secondly, if it

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must be understood literally, you must render the word *sicera* by strong, nourishing, palm jelly. He does not show, by-the-bye, why kings and princes should abstain from mere jelly.

So in the same way with the miracle at Cana, when the water was made wine. To drink intoxicating wine is sinful. Christ could not tempt men to sin. Therefore He could not have made intoxicating wine. Therefore the wine He made was mere grape syrup, and not fermented.

Our readers will not fail to notice the completeness of this mode of arguing in a circle, or begging the question, which seems congenial to the Teetotal intellect.

So far, however, as Professor Miller copies from Dr. Lees, he follows a man of great learning, whose very audacity renders him respectable. It is when he relies on his own resources that he exhibits the peculiar logic of Nephalism.

The object is, to torture the Old Testament, so as to cause "wine and strong drink" when used in a good sense, to be rendered "grape syrup and palm honey;" and to torture the New Testament to show that Christ never tasted intoxicating wine.

We have given two specimens of the summary and audacious mode of argument; now let us give one of Professor Miller's, which may be well expressed by the word—not effeminate—but emasculate.

There is a well-known passage in St. Luke, in which Christ complains of the inconsistent objections of the Jews. "John the Baptist came neither eating bread nor drinking wine, and ye say, He hath a devil. The Son of Man came eating and drinking, and ye say, Behold a gluttonous man and a wine-bibber." Nothing can be clearer here than the contrast between John the ascetic, who never touched wine nor strong drink, and One who mixed with sinners and dined and drank wine with the chief of the Publicans. But what says Professor Miller? John was a Nazarite, and under an ascetic vow which prohibited all produce of the vine, from the kernel even to the husks. Our Saviour, on the contrary, took grape syrup, or raisins, which John could not; and therefore was called *οἰνοπότης*, or wine-bibber!

There is another passage which speaks of old and new wine, in a way which seems clear to most of us—"No man having drunk old wine, straightway desireth new, for he saith, The old is better." Few persons doubt that *old* and *new* refer to wine, such as we understand by the word wine now—for old wine is better than new, whilst old syrup is not better. Not so, says Professor Miller. The emphasis is on the word *straightway*, or *immediately*. No man having drunk old, unfermented grape-juice, desires new *immediately;* for "old wine and new wine will not agree in the living organism when taken together at a meal; *pains and disturbance follow*"!

Strange as this feeble and dyspeptic reasoning is, we feel embarrassed with the abundance of weak and foolish arguments of which it is a sample; but we will select this:—"One might deny," he says, "that alcohol, *tortured by man* out of the cereals and the vine, is in any true sense a creature of God." If so, we may ask, what are the derivatives of alcohol? What is ether or chloroform? Where are we to draw the line? Is coal a creature of God, and gas not? Is carmine a colour of God, and the *mauve* that is tortured by man out of coal-tar a colour of the devil?

How repugnant are all these miserable sophistries and wordy juggleries to the plain, manly, truth-seeking spirit that ought to characterize the Practitioner of Medicine! With regard to Professor Miller's argument, that our Saviour never partook of wine (in our sense of the word), it may suffice to appeal to the universal tradition of Christians in the Eucharist, and to the *ὄξος*, or vinegar, which was offered on the sponge just before His death on the Cross: for a very slight study will show that the word vinegar is used as synonymous with wine, and that the thing was a weak, sour wine. But the cause which the Professor desires to serve is damaged beyond reparation by these foolish and audacious attempts to palter with the common-sense of the sacred narrative. What matters it whether the use of wine be sanctioned or not? It is not commanded; and if anyone believes it expedient to abstain, or to induce others to do so, he has reason enough on his side, and liberty to do as he likes. Professor Miller tells us of drunken "Ministers" and drunken "Surgeons:" nay, the whole land seems to teem with intemperance and unchastity; but surely there are weapons enough against these vices, without polluting Truth at her very source. We repeat it most emphatically, that in thus attacking one sensual error, he pursues a course which tends to the destruction of all truth, and therefore, of all morality; for without truth there is no morality. It is little creditable to the authorities of the University of Edinburgh that they should tolerate, and it is in the highest degree degrading to the Students that they should listen to, such a compound of ancient Manicheism and modern Puritanism, couched in a Scottish dialect not to be matched for affectation and pedantry.

THE WEEK.

On Tuesday the Edinburgh College of Physicians presented to their President, Dr. Alexander Wood, his picture, painted by Sir J. Watson Gordon,—"as a memorial of the sense the College entertained of the services rendered by Dr. Wood to the College in connexion with the operation of the Medical Act." A dinner followed the presentation, and Dr. Simpson presided. He said in his speech that Dr. Wood had "made the College." In his own speech Dr. Wood thus alluded to the two great Medical questions of the day,—the Medical Licence for General Practitioners, and the granting of Surgical Degrees by Universities. Speaking for his own College, he said:—

"We had to institute a new order of 'Licentiates,' or rather to revive one that had become obsolete. Our qualification was in Scotland to take the place of one-half of the qualification formerly given by the College of Surgeons, and in England to supersede that of the Apothecary, and thus elevate the family Practitioner by freeing him from the fetters of trade. Those who might for the future take this qualification would therefore take higher rank than those who were to be superseded by it. But among the latter class were many who wished a licence in Medicine as well as in Surgery, and who would willingly escape from association with the Apothecaries' Company if they could get a qualification in Medicine elsewhere. To meet this case 'the year of grace,' an invention of the London College of Physicians, was adopted, and as it seemed absurd to subject men who had been examined at their entrance to the Profession to another examination, another test was devised more suited to their age and position, and they were obliged to produce evidence of good social and Professional standing."

After a very inappropriate display of virulent invective upon all those who differed in opinion from him, the speaker proceeded to say that,—

"The Medical Act makes provision for abridging the number of examinations which the student must undergo by allowing two separate Boards to unite together for the purpose of conducting a joint examination. Accordingly, a union was formed between the College of Physicians, on the one hand, and the College of Surgeons in the east and the Glasgow Faculty in the west, on the other, by which a double qualification was to be given after a joint examination—joint at least as far as the branches common to both were concerned, but separate as to Medicine on the one hand and Surgery on the other." . . . . . .

"But now the Universities claim that they shall have the power to bestow all degrees and all licences, and this on a standard of general and professional education not above the minimum required by the Medical Council. The apology for this grasping policy is that the joint examination of the

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Colleges vitally injures the University. How can it do this? The University still licenses in Medicine more freely than it ever before did, for its degrees must now be accepted as legal qualifications for practice in England. The graduates in Medicine of the Edinburgh University can still take, as nineteen-twentieths of them have always done, the diploma of Surgeon from a College of Surgeons; for a double qualification does not necessarily imply a joint examination. Or if they pleased, they might unite with the College of Surgeons, as the College of Physicians has done, for the same offer was made to them. The evident policy they now are about to pursue is that by giving every Medical and Surgical licence, and accompanying these with a title, they may attract the larger proportion of the Medical Students to them as Licensing Boards; and by preventing the classes in any other than University Schools from qualifying for graduation, to secure as nearly as possible a complete monopoly for themselves as teaching bodies. . . . . And now that these ordinances are confirmed, as they yesterday were, by the Queen in Council, this result is likely to happen, and the whole arrangements for the future teaching will be made, not as in the Colleges by men independent of teaching and zealous for the interests of the Profession, but as in the Universities, by men, teachers themselves, and zealous, as they have often proved themselves, for their individual advantage."

This concluding sentence relates to the event of the week. On Monday the Queen confirmed the judgment of the Privy Council, and the University Degree of Master of Surgery will for the future be a legal qualification.

We are glad to hear that it has been determined by several graduates of the University of St. Andrews to present to Dr. Day, Chandos Professor of the University, "a testimonial of respect and confidence for the ability and good feeling which he has displayed in his position as the Principal Medical Professor in the University, and in recognition of those progressive improvements in the examinational system which he has so judiciously introduced, and which are being prosecuted with so much vigour, to the advantage and honour of the University." An appeal has been made to the graduates at large on behalf of this movement, and we are informed that a very handsome sum has been subscribed.

We find that, one by one, writers and observers appear to abandon the doctrine of the "specificity" of contagious diseases, and to declare their belief that they may arise from time to time *de novo* out of the dirt and neglect which surround us. We give, in another column, an extract from Percival's Lectures, which show what his belief was as to the origin of glanders in the horse, more than thirty years ago. Sanitary reformers have long shown the origin of diarrhœa in fæcal effluvia; Dr. Murchison has traced typhoid to the same cause; and, in a lecture delivered before the Royal Institution in 1859, and another before the Royal Institute of British Architects in 1860, Dr. Druitt summed up the evidence in favour of the spontaneous origin of scarlatina, diphtherite, erysipelas, hospital gangrene, dysentery, and ophthalmia, and of their propagation by contagion, under favourable circumstances. Mr. Simon has conceded the spontaneous origin of gonorrhœa and ophthalmia, and the contagiousness of suppuration, as a rule. Dr. Milroy, in a recent paper read before the Epidemiological Society, goes over most of the same ground. He referred to the spontaneous origin of hydrophobia, and of purulent ophthalmia, and to the undoubted fact of the occasional propagation of the latter disease by atmospheric dispersion. He showed the close resemblance between the plague and typhus fever, in origin, development, and obedience to hygienic measures; and the belief that the plague may arise *de novo* is confirmed by the fact of its appearance on the Bombay coast recently. With regard to the yellow fever, Dr. Milroy shows that in upwards of 1000 cases in the Quarantine Hospital at New York, the disease never spread by contagion, though the case was otherwise on board the *Eclair*. So also cholera, he believes, may be generated *de novo*, and likewise propagated by contagion, if the circumstances be favourable; the same with dysentery, erysipelas, and puerperal fever. On these subjects Dr. Milroy seems to agree in the views of the authors we have mentioned, and his paper shows a tendency in the professional mind to adopt new and what we may call liberal views.

A correspondent complains of the interference of the clergy with the Medical treatment of the sick. Possibly the clergy may complain that some Medical men are too fond of meddling in spiritual matters. In either case there is, we think, a rule which common sense and good taste mark out as not to be transgressed. If a sick man have no spiritual adviser, the Medical attendant should do his best to console him; if he have no Medical attendant, the clergyman may do what he can to relieve physical suffering. But a Surgeon would be guilty of gross impropriety if he interfered with the counsels of the parish priest; and so would a clergyman be, who meddled with the prescriptions of the parish doctor. If he believe there is want of skill, or of humanity, he is bound to complain; otherwise, *Cuilibet in arte suâ credendum*. When a clergyman has some pet quack remedy, be it a marvellous tincture or a tamarind emulsion, and gives it to persons who are already under competent Medical care, he undertakes a responsibility too great for a conscientious man, who already must feel the duties of his own profession enough for one man's shoulders.

The Report of the 115th Annual General Court of the Small Pox Hospital shows, that 875 patients were admitted during the past year, of whom 752 were cured, and 123 died. Of the 875 patients 858 were affected with small pox, and of these 161 were unvaccinated, and 697 vaccinated. The mortality among the 161 unvaccinated was 56, or 34·78 per cent. Among the 697 vaccinated, 66, or 9·46 per cent. The epidemic of last year had produced more admissions than had been known from the foundation of the Hospital in 1746, for there were 91 patients on December 31, 1859, and only 27 at the corresponding period of the preceeding year. The report in the *Times* states that more than 1000 charges of vaccine lymph had been distributed gratuitously to Medical Practitioners. Of course it is right to give lymph if asked for; but it is wrong to sanction an imperfect and deceptive system of vaccination. Lymph sent about on *points*, can never be used with the certainty and efficiency of fresh lymph taken from a healthy arm.

We learn that the ten tribes of Tasmania have, in the eighty years which have elapsed since the colonisation of that part of the world, been reduced to fourteen adults, who now live a miserable animal life, and subsist on an allowance from the English Government. Although of the fourteen, nine are women, and five of them under 45 years of age, no children have been born to them for many years. There is, however a half-caste child, the offspring of a native woman with a white man.

How to remove a man who has broken his leg is a piece of semi-Medical knowledge which is worth diffusing amongst the community. We have been shocked before now at seeing a poor fellow lifted into a cart, screaming with pain, whilst a broken leg was dangling unsupported. Some useful hints on this subject, and a method of forming an extempore litter, are

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to be found in a sheet of "Plain Rules," published by the Society for Promoting Christian Knowledge. Mr. E. L. Hussey, of Oxford, points out the utility of a public stretcher for the conveyance of persons affected with sudden illness or accident. A window-shutter from a shop, a hurdle, or a sack strained between two pitchforks will answer the purpose; but the great point is so to lift the patient as not to aggravate the injury he has sustained. For this purpose both knees, feet, and ankles should be securely tied together; and, as Mr. Hussey advises, the hands should be tied together also.

It appears from the evidence of Dr. Wyld, at the inquest held on the remains of Dr. Baly, at Merton, on Thursday last, that the unfortunate gentleman had been sleeping; that he awoke confused and disturbed by the first crash of the accident; and that rising from his seat he fell backwards immediately through a hole in the side of the carriage, and was crushed by the carriage in its further fall. Life was probably extinguished before he had thoroughly awakened from that sleep.

The Court of Queen's Bench has refused the rule for a writ of *melius inquirendum* in the Road Murder Case. The affidavit of the Coroner, Mr. George Sylvester, showed that he was 72 years of age, and had been in practice as a Surgeon for 50 years; besides that he had been Coroner for 19 years and had presided over 2000 inquests. A charge of *mala praxis* had been brought against him, for an alleged improper direction to the jury; for it was charged against him that he had said that it was no business of theirs to find out who had murdered the child. This was denied. It was likewise explained that his refusal to examine Mr. Kent and Miss Constance arose from the fact that they were openly accused by the by-standers, and in danger of insult from the excited mob who surrounded the inquest-room.

It is with singular pleasure that we refer to the complete exoneration of the Rev. H. Douglas from the charge of mismanagement of funds collected by him for the benefit of the poor population of Plaistow Marshes. Having visited the locality in question, we can testify to the fact that in a muddy swamp, intersected with foul ditches, occupied by a destitute population of the lowest order, and subject to great fluctuations in the rate of wages, a gentleman of fortune was found willing to place himself, away from "society" and all its luxuries, and there to devote himself, not only to the moral, but to the physical and substantial welfare of his miserable flock. Vituperation is always the appanage of success.

The newspapers give accounts of the discovery of wells of mineral oil, petroleum, or rock oil, in Erie County, Pennsylvania, at Oil Creek, a branch of the Alleghany River, and outer banks of Thames River, Canada West. This oil was formerly collected by the Seneca Indians, and used for rheumatism, under the name of Seneca oil. It is said to be an excellent lubricator, to yield a capital light when burned, and to be free from risk of explosion.

Notwithstanding Dr. Headlam Greenhow's apologetic Report in 1857, we are glad to see that the flesh of diseased animals is seized and condemned by the Inspectors of Markets in the City of London. A "respectable" meat salesman in Newgate market has been summoned, and fined £10, for exposing for sale the carcases of five rotten sheep, so emaciated as to weigh only from 18 lbs. to 25 lbs. each. Dr. Greenhow pretends that "there is no satisfactory proof that the consumption of meat derived from diseased cattle has in this country been productive of direct injurious consequences upon those who have eaten it." Dr. Letheby considers that, if not well cooked, it may produce low fever or cholera. Human instincts support Dr. Letheby.

Few things interest our readers more directly than Fees, and we are certain all will hear with pleasure that a well-known Practitioner at the West-end has recently received the very handsome fee of £5000. A well-known civil engineer, lately deceased, left £1000 by his will to his Medical man, and the widow of the engineer, so far from thinking the legacy excessive, added £4000 to the sum bequeathed by the deceased, and last week presented the fortunate Doctor with this very pretty addition to the credit side of his banking account. Doctors differ upon very many subjects, but we suspect most will agree in the opinion that the engineer was a very good man, and his widow a particularly estimable woman, whose example cannot be too soon or too widely followed.

OBITUARY.

DR. WILLIAM BALY.

William Baly was born at Lynn, in Norfolk, in 1814. His father was in general business there, but occupied himself in literature rather than the pursuit of wealth; his mother was a lady of cultivated mind, with remarkable good sense and energy. He was educated in the Lynn Grammar-school, and was apprenticed to Mr. Ingle (now Dr. Ingle, of Emsworth), an active and esteemed General Practitioner in that town. In 1831 he entered as a pupil of University College, and in 1832 at St. Bartholomew's Hospital. At the former he attended the Lectures, and at the latter the Practice, necessary for the usual diplomas of the College of Surgeons and the Apothecaries' Hall. At both Schools alike he distinguished himself by earnest and successful work; but at the end of his pupilage, he attached himself to the one which he had selected for the practical studies for which he had the most affection and the most capacity. Among all his works, that to which he devoted himself with the greatest zeal was clinical medicine, and in this his chief teachers were Dr. Latham and Dr. Burrows, who even then observed so much of good promise in him, that they advised him to prepare to venture on the life of a Physician in London.

Accordingly, in 1834, after passing the College of Surgeons and the Apothecaries' Hall, Baly went to Paris, and, after a winter's study there, to Heidelberg, and thence to Berlin, where he graduated as Doctor of Medicine in 1836. On his return to England, he started for practice in Vigo-street. A year later, and while holding, for a short time, the post of Medical Officer to the St. Pancras Infirmary, he lived in Devonshire-street. For the next five years he lodged in Brook-street.

A great portion of Baly's time, during the first four years that he thus spent in London, was occupied with the translation of Müller's "Physiology," a task which he executed with the same scrupulous care as he gave to all his later works. For he not only rendered the German into better English, but he thoroughly studied and literally worked through the book, repeating many of the observations it described, and examining many of its doctrines. If the notes which he was thus enabled to add to the work could have been published separately, they would have justly gained for him the reputation of being an expert and original physiologist. This was the more remarkable, because he undertook the work with no special love for physiology, and with no design of making it his pursuit in life. His chief motives were, that the work offered him the means of earning some money, and of honestly displaying the power with which he was prepared to enter on the contest of his life. And the

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power he displayed made every one feel as sure as his first teachers had long felt, that his place, some day, would be among the highest in his Profession.

In 1840, through the recommendation of Dr. Latham, Baly was appointed to visit and report on the state of the Milbank Penitentiary, where dysentery was very prevalent. This led in the next year to his appointment as Physician to that Establishment. The post was of immense advantage to him. It gave him sufficient means of living, while he had very little private practice; the number of sick under his care was often large; their diseases had peculiar interest; and he was brought into contact with Government officers, many of whom could appreciate his trustworthiness and rare ability. Indeed, it afforded a remarkable proof of the excellence of Baly's mind, that for the nearly twenty years during which he held this appointment, and among all the changes to which the prison was subjected in its discipline and purpose, and in all the varieties of administration under successive Home-Secretaries, Inspectors and Governors, he was always well-esteemed, always trusted, and very generally referred to as a principal Medical adviser of Government on questions of the hygiene of prisons. The chief results of his studies at the Prison are comprised in his numerous reports; but, more especially, in a most elaborate paper on the Diseases of Prisons, in the twenty-eighth volume of the "Medico-Chirurgical Transactions," and in his Gulstonian Lectures on Dysentery, published in 1847. To the same studies, also, may be referred much of the knowledge displayed in his Report on Cholera, written at the desire of the College of Physicians.

In 1841 Dr. Baly became Lecturer on Forensic Medicine at St. Bartholomew's Hospital. The sole ground of his election was, that they with whom it rested to recommend for the appointment were convinced of his high merit, and that he would add largely to the reputation of the School. He held the Lectureship for fourteen years; and though, as his simultaneous work at the Prison showed, he never forgot that the real business of his life was in Practical Medicine, yet he worked at the Lectures as if they were his chief duty, and their subjects those in which his skill was to decide all his success. It was an admirable instance, either of his simple devotion to duty for its own sake, or of his wise conviction that duty, wherever done, will somewhere find its full reward.

In 1846 Baly was admitted a Fellow of the College of Physicians; in 1847, a Fellow of the Royal Society; in 1854 he became Assistant-Physician to St. Bartholomew's Hospital; and in 1855, in conjunction with Dr. Burrows, Lecturer on Medicine there. He was now fairly in the tide of practice, with every prospect of attaining high reputation as an Hospital-Physician, and of multiplying a hundred-fold the value of his knowledge by diffusing it among his pupils. But he was to be yet more eminent, his influence yet larger. In 1859 a Physician was required, who might at first share with Sir James Clark, and then hold alone, the office of regular attendance on the Queen and Royal Family. Those who were charged to make a just selection for this high office, were free from all personal regards, from all solicitations and undue influences,—they had the whole Profession to choose from; and when, to Baly's great surprise, he was selected, the unanimous voice of the whole Profession acknowledged that he was the fittest man. How well he justified the opinion was shown by the proofs of confidence which he received from the Queen and the Prince Consort, and by the esteem in which he was held in all the palace.

Thus had Baly risen, till the greatest honours of his Profession seemed quite within his reach: more than his ambition might soon be satisfied: he appeared to stand firm, in the confidence of his Sovereign, in the high esteem of all his brethren, in the affection of many friends: the pride of sisters who had worked lovingly with him in his laborious days; he was glad in his success, brightened by prosperity; but, from all this happiness, in a moment he was hurled to death;—yet not to death; for they who knew his inmost mind are sure that, in the midst of this life, he was preparing himself for another and far better.

It will be asked hereafter, what was the secret of Baly's singular success? Truly, there was no secret in it. He had excellent intellectual capacity, and great working power; he was very prudent, gentle, true-hearted, and virtuous; and he daily cultivated and used all his powers, with the single view of doing the best he could in the daily duties of his life. His intellectual strength was not in any one of his mental powers, but in the fair proportions of them all. He had keen senses; very clear observant power; great caution and sobriety in thinking; an excellent ability in analysis. Few could sift facts better than he, or bring them out with more clearness and simplicity; he was, eminently, clear-headed. And all that he did—his practice and his lectures, his writings, and his conversation—represented this character of his mind; all was clear, simple, definite, and orderly.

An excellent feature in his disposition was a corresponding simplicity and sincerity of heart. He never professed to be what he was not; nay, he never professed himself what he was; he did well, without any self-assertion, and seemed content to do his duty without claiming or expressly seeking for its reward. Doubtless, among the motives that impelled him to a laborious exertion of his powers, ambition had some place; but his ambition was happily tempered by a natural timidity, which made him always prudent. Hence, probably, it was that he never committed the faults of mere ambition; he never wasted time or power in striving after things which he was unfit for or unlikely to attain; he never sought for praise or reputation in pursuits that were alien from his proper work; and when his ambition was gratified, he had the same prudent fear lest he should fall short of the full discharge of the responsibilities which high station and opportunities of doing good brought with them. To the last, he never made light of duty; he never thought it easy to do well; he did not presume that he had yet done his best; he seemed to think that there was in store some far better thing for him to do.

It will readily be believed that Baly was very popular among his pupils and professional brethren. His popularity, like his success, came to him without being expressly sought. It was the natural result of his honesty, gentleness, and liberality, and it increased with his merits. He tolerated kindly the faults of others; he saw them clearly enough, but he did not resent them; he spent his life without a controversy, and among the crowds that followed him to the grave, there were many who had loved him and had rejoiced in his prosperity, though he was their successful rival.

These were the plain reasons of Baly's prosperous career; and the best lesson which our Profession may read in his life—yet not safely, till they have well studied the solemn lesson of his death—is, to believe in the sufficiency of intellectual and moral excellence for the attainment of great success. He was, at first, entirely without those external advantages which men are too prone to regard as indispensable to the gaining of professional eminence. He entered the Profession by the broad and most frequented road; he started in the crowd, with neither wealth nor costly education; he began life without any advantage of social position, without an influential friend; he had no brilliant genius, no lucky gift of cleverness. Yet his career was a constant success; and, in its course, he gained and learned to use as many of these aids to progress as he desired. He constantly cultivated and adorned his mind, and made friends in every rank of life—literally from the Prison to the Palace,—and when he died, the grief was as wide-spread. It was the grief not only of bereavement but of disappointed hope: for all felt that had Baly been permitted to live long he would have achieved great things for his Profession and the world.

FOREIGN MEDICAL VETERANS.—The Parisian journals announce the recent deaths of the following Physicians, viz.:—Dr. Tiedemann, aged 87, at Munich; Dr. Germa, aged 86, at Paris; and Dr. Van Vaerenbergh, aged 84, at Antwerp. The above advanced ages show that longevity is not an uncommon occurrence among our continental *confrères*.

HUNTERIAN ORATION.—Mr. Coulson will deliver the Hunterian Oration in the Theatre of the College of Surgeons, on Thursday next, at three o'clock.

THE sum of £52 10s. has been assigned to the Royal Medical Benevolent College by Edward Unwin Berry, Esq., of James-street, Covent-garden, residuary legatee and almoner for the charitable distribution of the estate of the late Richard Hall, Esq., of Sloane-street.

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REVIEWS.

A Treatise on Diseases of the Joints. By Richard Barwell, F.R.C.S., Assistant-Surgeon to Charing-cross Hospital. 8vo. Pp. 469. London: 1861.

Mr. Barwell is well known to the Profession as a writer on the anatomy and diseases of joints. The increase of knowledge of diseases of the joints, and especially of their treatment, has been so great during late years, and the whole subject is so important and attractive that we cannot wonder at an earnest worker like Mr. Barwell wishing to bring before the Profession the results of his own experience and investigations in a comprehensive form.

At the outset we may state that the work is worthy of much praise, and bears evidence of much thoughtful and careful enquiry, and here and there of no slight originality. It is divided into two portions: the former is occupied with the Physiological Anatomy of the Joints, and the consideration of those diseases which affect the various structures of the articulation, whilst the second treats of the Affections of the Bones, or rather those commencing in the bones.

The first chapter, on the Physiological Anatomy, is a useful prelude. The debated question as to the relations of the synovial membrane and cartilage is discussed, as is the existence of a vacuum in the cavity of a joint, producing externally a pressure which materially aids in keeping the joint-surfaces in apposition and preventing dislocation. With regard to the former matter, Mr. Barwell says:—"My own conviction is, that at no period is this cartilage covered by synovial tissue, but that the membrane becomes lost very near the edge of the cartilage" (p. 14); and, as respects the vacuum theory, he states, "The whole vacuum theory is untenable; the only fact which resembles it at all is, that cohesion of contact takes place between the joint-surfaces, but this is not a vacuum: a vacuum is a space containing neither air nor other material. The cohesion we speak of takes place when there is *no space* between the parts interested."—(P. 20.) He then goes on to show that the means by which the various joints are kept in powerful contact are anatomically sufficient, independent of any atmospheric pressure.

The second chapter, treating of Acute Synovitis, contains a good description of this disease, and some light is thrown upon its pathology by the account of a *post-mortem* examination of a case where the patient died a few days after suffering from acute synovitis. Even at this early stage, it was found, besides various other morbid phenomena, that "on the inner condyle of the femur was a spot as large as a sixpence whence the cartilage had entirely disappeared; the edges of the ulcer were perfectly smooth, sharp, and clean. The rest of the cartilage was entirely healthy."—(P. 36.) There is a very clear and correct distinction made between the acute synovitis of the hip-joint and the enlargement of the bursæ near that articulation,—two diseases which are by no means unlikely to be mistaken the one for the other.

With regard to the treatment of this disease, we are glad to find that Mr. Barwell recommends free incision into joints when suppuration has taken place, as recommended by Mr. Gay. It is an admirable means of preventing destruction of a joint. We have seen, both in our own practice and in that of other Surgeons, some remarkable recoveries after free incisions have been made into suppurated joints.

In the next two chapters, Rheumatic Inflammation of Joints and Purulent Infection are treated of at some length. Mr. Barwell considers that gonorrhœal rheumatism is a species of purulent infection. The treatment he proposes consists of large doses of quinine and the avoidance of specifics, as copaiba and colchium.

Chapter V. is a long and interesting one on Strumous Synovitis, one of the most common joint-diseases as seen at least in public practice in London and other large towns. The morbid appearances, both anatomical and microscopical, are well detailed, and the different forms in which scrofula affects the body generally are admirably portrayed. The symptoms appertaining to this particular joint affection, are set down at length; and the changes attending on the formation and production of anchylosis are described clearly and in a short compass at page 133.

For the treatment of this serious form of joint-disease the author lays down the ordinary rules; but we find he discusses very fully, as it deserves, the employment of the actual cautery,—a remedy not sufficiently used now-a-days. The reason for this disuse is in all probability to be found in the growing dislike in Surgeons to burning with fire or chemical agents in any form, and to the pain which they cause; but Mr. Barwell has put it very sensibly that the objection to the use of the cautery may be done away with by chloroform, and that in truth the rapid and extraordinary relief which is given to patients renders the hot iron a merciful instead of a cruel remedy. "The stage of strumous synovitis to which it is more particularly adapted is that in which the first symptoms of inflammation have somewhat subsided, but in which such action continues and enlargement it still going on." And again, as to the effects of the remedy, "If the irritation and pain have disappeared on the use of this application, we may feel assured that the active congestion and spread of the disease has been arrested; the tenderness even on the localities of its choice will vanish, and our next care is to insure the continuance of this change, and to produce absorption; or, if not, consolidation, and further development of the unhealthy tissue."—(P. 141.)

In the next four chapters the subjects of Chronic Rheumatic Synovitis, Syphilitic Synovitis, Hydrarthrosis, and Loose Cartilages are considered. The question of treating a dropsical joint by the injection of iodine is discussed. Mr. Barwell speaks favourably of the plan, and states that it is by no means a dangerous proceeding, although it may appear to be a somewhat severe one.

At Chapter X. the second half of the book, treating of diseases commencing in the bones, begins. In this and the three following chapters, acute osteitis, strumous osteitis, chronic arthritis, and inflammation and degeneration of cartilages, are considered and described with great care and correctness. We would especially refer the reader to the description of necrosis and caries. At page 251 he will find the effects of the separation of a portion of necrosed bone into the cavity of a joint laid down very clearly. Mr. Barwell makes one error, he says, "Fortunately, such cases are of rare occurrence." He will find that such cases are by no means so rare as he supposes, and that, on the contrary, the separation of a portion of necrosed bone into the cavity of a joint is by no means an infrequent occurrence, and one which mainly leads to the necessity for an amputation or excision.

Chapter XIV. is a long one, devoted to Diseases of the Hip-joint. To the consideration of this disease one of the most excellent and practical treatises on any Surgical subject, was devoted, so long ago as 1794, by Ford, then Surgeon to the Westminster General Dispensary. Mr. Barwell very properly and quaintly refers to this work as a "sort of unacknowledged Loan-office for many subsequent writers on the subject."

The author considers that this disease commences primarily either in the synovial membrane or the bone itself, and quite discards the notion of either the ligamentum teres, as supposed by Mr. Aston Key, or other structures being the original seat of the malady. The three stages, as laid down by Ford, are adhered to and well described by Mr. Barwell. On the question of spontaneous dislocation, we find that he has not fallen into the common error of describing dislocation as of ordinary occurrence. On the contrary, he seems to have fallen into the opposite extreme; and as he appears only to have met with two instances of spontaneous dislocation within ten years, thinks that this condition is a rarity. The truth is, in the greater number of cases of hip-disease which have run through their various stages, spontaneous dislocation does not occur, but its occurrence, although over-estimated, is not unfrequent, according to our experience of a large number of cases of hip-disease of the worst description. The apparent dislocation and distortion which are seen are very fairly and clearly placed down to their proper causes by Mr. Barwell—viz., to alterations in the shape and position of the acetabulum, and head and neck of femur, also of what he terms *contractured* state of the muscles about the joint.

The treatmeut of the disease in its various stages is considered at length, and the measures used by most educated Surgeons—viz., rest, counter-irritation, and the use of an extending splint strongly recommended. We may mention that Mr. Barwell has a peculiarly constructed apparatus of his own invention, which would appear to answer the desired purpose well.

Chapters XV. and XVI. are devoted to the Affections of Synovial Sheaths and Bursæ and to Hysteric Affections of

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Joints; and the last two chapters treat of the Restoration of Crippled Joints, and of the all-important question of Removal of Diseased Joints.

This subject is discussed in most of its bearings in a calm and impartial spirit by Mr. Barwell, and although from the able investigations which have lately been made upon the relative merits of amputations of limbs and excisions of joints, there is little of what the author places before us which is not well known, yet the conclusions he arrives at, after very careful consideration, are worthy of notice, and we believe will be forced upon the minds of most of those who have had much experience of operations upon joints. A very fair and correct *résumé* of the history of excision of joints is given; the conditions rendering any operation necessary are clearly set forth, and the relative merits both of amputation and excision are given without strong leaning to either side of the question. A careful perusal of this very useful chapter will, however, lead one to the conviction that excision, as a rule, has the advantage over amputation, so far as regards danger to life. Mr. Barwell unquestionably proves that more persons die after amputation than after excision, even in the lower limbs. On the questions of excision of the head of the femur and of excision of the knee-joint, the author dilates at considerable length, and although fully recognising the disadvantages which may attend and follow upon such treatment, yet appreciates, without blind devotion, the value which can be conferred by the Surgeon who adopts the proceedings in proper instances. We question very much whether the plan of excising the whole hip-joint, as advocated by Mr. Hancock, will be attended with much success; and Mr. Barwell is sadly in error in the following remark:—"Till quite of late years, it has been held only justifiable to decapitate the femur when that bone is displaced, and lies upon the dorsum ilii; but subsequent experience has shown that this circumstance affects the case only inasmuch as it renders the operation a little, but very little, more easy."—(P. 439.) Now, Mr. Barwell, like others, has overlooked a very important fact in connexion with this dislocation of the head of the thigh-bone, and affecting the fitness of this operation. It is this, that after dislocation has occurred, for some time the acetabulum, which had probably been as much or more diseased than the other side of the joint, has a great tendency to recover itself when the head of the femur is no longer in contact with it; and, in course of time, becomes perfectly healed by the deposit either of new bone or a soft material, filling up its cavity. Curiously enough, while this is going on on the acetabular side, there does not appear the same tendency in the femoral head to recover, but it lies as a foreign body, creating great irritation and requiring removal. It is true that the operation is rendered more easy when dislocation has occurred; but the grand reason why, in such conditions, the value of the operation is so great, is the state of the acetabulum which we have mentioned, and which we have witnessed on several occasions when excision of the head of the femur has been performed for disease of the hip-joint, attended with dislocation; and, notwithstanding the modern views about cutting out the whole joint, we are still of opinion that it is in such instances that the operation will be found to be chiefly successful,

Mr. Barwell speaks cautiously as to the excision of the knee-joint, and, by the aid of statistics, makes out a case in its favour. He considers that the ultimate utility of the limb in the cases which have already been operated upon has not yet been sufficiently tested. There will ever be difficulties in ascertaining this point in every instance, but the evidence already laid before the Profession with regard to the effective limbs which were preserved for the patients is quite sufficient to prove that no artificial apparatus can substitute for a well-anchylosed knee after resection.

We have already carried this notice further than we intended to do, but not to the extent the work deserves. We can only add, that the perusal of it has afforded us great pleasure. The author has evidently worked very hard at his subject, and his investigations into the Physiology and Pathology of Joints has been carried on in a manner which entitles him to be listened to with attention and respect. We must not omit to mention the very admirable plates with which the volume is enriched. We seldom meet with such striking and faithful delineations of disease.

Foundation for a New Theory and Practice of Medicine. By T. Inman, M.D. Second Edition. 8vo. Pp. 528. London: 1861.

Having so recently reviewed the first edition of this work, we should hardly do more than announce the appearance of the second, had not the author added a very energetic preface, in which, while stoutly asserting his opposition to Homœopathy, he speaks strongly in favour of Homœopaths. This is precisely the opposite course pursued by the patients of these gentry. It is not very long since a nobleman who had been suffering from gout for three months under Homœopaths, and was then cured in three days by alkalies and a little colchicum, was asked by a celebrated mathematician—"How is it, my dear——, that when you are well you talk about Homœopathy, but when you have gout you send to——?" "Oh," said his lordship, "Don't suppose I have lost faith in the system—No, no!—the system is good; but I have no faith in the men who practise it. There are no men of talent among the Homœopaths; and I would rather be treated on a false theory by a clever man, than on a true one by a fool." Now Dr. Inman sails precisely on the opposite tack. He says he is obliged to confess that a majority of the Homœopaths are "in mental calibre superior to the majority of their opponents." We can only say we should be glad to hear where the distinguished Homœopaths are to be found who have proved themselves by their works to be superior in mental calibre to the "majority" of the Profession. We never heard of even one who had made a single discovery either in Medicine or in any of the collateral sciences. Surely if Dr. Inman would reflect for a moment on the comparison at once suggested between the names of Brodie, Bright, or Watson—of Carpenter, Huxley, or Owen—of Conolly or Simpson—and those of the Homœopathic celebrities, Quin, Epps, and Laurie—Wilson, Bell, and Drysdale (there is scarcely another whose name we can even recall)—he will blush for the objects of his admiration.

The Nuisances Removal and Diseases Prevention Act of 1855, (18 *and* 19 *Vict., cc. cxvi. and cxxi.,*) *with Introduction, Notes, and Index.* Second Edition, in which is comprised the Amending Act, 23 and 24 Vict., c. lxxvii., and the Official Documents Issued thereon. By William Golden Lumley, Esq., of the Middle Temple, etc. Pp. 172. London: 1860.

This very useful publication gives a full and explicit account of the existing powers for the removal of nuisances and prevention of diseases. It may suit the lawyer and the country gentleman, or Surgeon or legal amateur; for it contains both the letter of the law for the one, and explanatory statements for the other. We conceive that the powers already existing for the suppression of disease and its causes are very imperfectly known to the public, and even to members of our Profession. Now those powers are enlarged, and the processes simplified, and any private individual may complain before Justices, a privilege heretofore reserved for local authorities, who might be nonexistent, or in a state of hibernation. This book deserves to be on the table of every country gentleman.

Catalogue of the Antiquities of Animal, Copper, and Bronze Articles in the Museum of the Royal Irish Academy. By W. R. Wilde, M.D., M.R.I.A. Illustrated with 377 Wood Engravings. Dublin: 1861.

It is impossible to notice this Catalogue without offering a just tribute to the enormous research, and the almost universal acquirements of the author; nor do we less admire his national spirit.

"Unlike England, where the Roman, Saxon, Norse and Norman invaders, each in succession, ruled for centuries, and left their remains in such abundance as nearly to obliterate all vestiges of its primeval inhabitants, Ireland has remained, notwithstanding all her vicissitudes, in possession of her ancient language, and a greater amount of the vestiges of her early people, than any other nation in North-Western Europe."

There is no doubt of it; and if the Celt will but imitate the love of order and plodding, methodical habits of the Saxon, his own gaiety and *savoir vivre* will make him a match for any of the other races in the Empire.

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The Catalogue before us contains an account of those manufactured articles which form the almost only reliable record of the early inhabitants of Ireland. There is no page of it that is not teeming with interesting facts and observations.

"The more we study man in his primitive simplicity, and collect examples of his arts, as still existing among savage people, the more we are driven to the conclusion that in certain phases of life and states of progress, he acts as if by a common instinct or impulse to fulfil the like purpose, provide for the same necessities, and, prompted by similar desires, offer the same stages of development, merely modified by climate, the natural productions of the country he inhabits, and by race."

Diagrams of the Nerves of the Human Body—exhibiting their Origin, Divisions, and Connexions; with their Distribution to the various Regions of the Cutaneous Surface, and to all the Muscles. By W. H. Flower, F.R.C.S. London: 1861.

These plans, or maps, of the nerves, it should be understood, are not plates, but (as the title informs us) diagrams. The object of Mr. Flower has been to make such a knowledge of the anatomy of the nervous system as is necessary to the Physiologist and to the Medical man easily attainable by Students, and easily recalled by the busy Practitioner. We need only say that Mr. Flower has done extremely well all that he tried to do, and that he has produced a work which is likely to prove of great utility.

A Veterinary Toxicological Chart: containing those Agents which are known to Cause Death in the Horse and other Domesticated Animals, with the Symptoms, Antidotes, and Tests. By W. J. T. Morton, formerly Professor of Materia Medica and Chemistry. Second Edition.

Horses, it appears, are liable to be poisoned through malice, or carelessness on the part of their attendants, or their own indiscretion in eating unwholesome plants, as the yew and colchicum. This Chart is useful to those who have to treat such accidents.

Sore Throat: its Nature, Varieties, and Treatment, including the Use of the Laryngoscope as an Aid to Diagnosis. By M. Prosser James, M.D., Senior Physician to the Metropolitan Dispensary, etc. Pp. 155. London: 1861.

A book which we read in vain with the hope of getting anything exact or explicit which shall be a guide to the Student or Practitioner. Dr. James believes largely in the febrifuge and anodyne virtues of aconite; but the cases which he has brought forward do not prove much in its favour. A delicate woman applied on a Monday for relief from sore-throat: fauces intensely congested, deglutition painful, constant tickling, and slight cough, with smart pyrexia. One drop of tincture of aconite every four hours. On the following Thursday she was much improved, and after three days more, cured. Nothing to boast of, we think.

Stammering and Stuttering, their Nature and Treatment. By James Hunt, Ph. D., F.S.A., F.R.S.L., F.E.S., etc. Pp. 176. London: 1861.

The writer appears to be the son of a gentleman who possessed some skill in the relief of defects of speech. He praises his father's mode of treatment, but does not describe it.

The Gastric Regions and Victualling Department. By An Old Militia Surgeon. Pp. 119. London.

A rambling, good-humoured caution to Volunteers against fat and flatulence, and against French wines and cookery, which the author seems to think as dangerous as any threatened invasion.

Constipated Bowels: the Various Causes, and Rational Means of Cure. By B. S. B. Birch, M.D., Hon. Member of the Salopian Medico-Ethical Society. Pp. 189. London: 1861.

A wordy, discursive book, fitted for the library of the dyspeptic, rather than of the Physician.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

CASE OF UNIVERSAL EMPHYSEMA IN PERTUSSIS.

By Dr. BIERBAUM.

During an epidemic of pertussis, Dr. Bierbaum was called to a child, 3 years of age, who had been the subject of the disease for about four weeks. The paroxysms had not been violent, and terminated in vomiting. Until ten days before, the child had seemed very well, eating and drinking, and playing, notwithstanding the cough; then, however, he lost his spirits and appetite, and became fretful, hot, and thirsty; a disposition to sleep set in, and a mucous *râle* was heard on auscultation. After this change had continued for some days, emphysema exhibited itself throughout the entire surface of the body. So much were the eyelids swollen, that the eyes could not be opened. The whole head and face were likewise swollen, though at the upper part of the former the tumefaction had begun to diminish. The neck was excessively swollen, giving the head an appearance of being thrown backwards. The entire thorax, abdomen and dorsal surface participated in the distension, which was limited by the mesial line of the body; the sternum and linea alba forming a furrow, although even these parts themselves were also slightly tumefied; of the vertebral column scarcely any mark could be found; below the distension was limited by the inguinal regions. The enormous swelling of the scrotum was most remarkable, as it stood erect, as it were, between the outstretched thighs; across the middle its circumference measured nine and a-half Rhenish inches; injected by dark vascular branches, it was transparent, exceedingly light, tense and elastic, the raphe dividing it into two equal semicircles. The penis had almost disappeared behind it. The thighs, as well as the knee-caps, exhibited only slight swelling, and the legs were entirely free from it. The arms were considerably swollen as far as the wrists, the hands and fingers not participating in this. The drowsiness and feverishness had passed away; there was no dyspnœa, and auscultation exhibited puerile respiration without *râle*. Camphor liniment was applied to the surface, and fomentations to the scrotum, which became distended to bursting of the skin; and in a short time the emphysematous swelling disappeared, the child quite recovering its health afterwards.

The author has witnessed many epidemics of pertussis, as well as all kinds of accidents produced by it,—as convulsions, excessive epistaxis, effusion of blood under the conjunctiva, meningitis, etc., and he has observed in several children, when the cough has been violent, the production of œdematous swelling of the face, eyelids, and forehead; but he has never before seen an example of general emphysema resulting from this cause. P. J. Frank relates a case very similar in its circumstances to the present one.—*Journal für Kinderkrankheiten*, vol. xxxv. pp. 91—96.

CASE OF POISONING BY ATROPINE.

By M. ROUX.

M. Roux, of Brignolles, relates the following case:—A lady, about 30 years of age, in a moment of despair, swallowed a solution of atropine, which was in the house. It was calculated that the quantity of the spirituous solution swallowed must have contained at least nine centigrammes (about one and a-half grains) of atropine. M. Roux found her at half-past nine with the face high-coloured, and the conjunctivæ vividly injected, the pupils being so dilated as to leave nothing of the iris but a circular thread. Sight was not entirely lost, but the images of bodies were confused and reddish, a thick cloud, also, seeming to surround them. By the assistance of tepid water she had vomited abundantly. There was a tendency to sleep and chilliness, cramp and tinglings of the extremities. The pulse (150) was small and depressed. A cup of very strong coffee was given her every quarter of an hour, cold applications were made to the head, while sinapisms were applied to the feet. The coffee was at first rejected, and at eleven o'clock it was given as an enema. Soon afterwards the nausea diminished, and some of the

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infusion was then retained by the stomach. At one o'clock there was violent delirium and restlessness, the patient insisting upon getting up. The teeth were parted with difficulty, but deglutition continued easy. There was tenesmus, and frequent desire to pass urine, as is usually observed in poisoning by belladonna. The urine passed was clear. Recollecting M. Bouchardat had recommended the iodide of potassium as an antidote for belladonna, M. Roux prescribed it, notwithstanding its reputation as a provocative of abortion, the patient being five months advanced in pregnancy. He ordered a mixture composed of 15 grains of the iodide, 2 grains of iodine, and 12 ounces of water; a glass-full every half-hour. At half-past one another coffee enema was given, and cold aspersions were directed over the face. The restlessness gradually diminished, a mild delirium, accompanied by involuntary movements, replacing the furious delirium which had prevailed. The tongue was red and dry, but there was no thirst, and the pulse had sank to 110. By six o'clock, the patient had taken one-half the mixture, and a considerable quantity of coffee. Although calm, her ideas were still incoherent, and she complained of an inclination to sleep, without being able to sleep. At seven o'clock the iodine and coffee were suspended. Little sleep was obtained in the night, but next morning the patient was able to rise; the pupil still continuing widely dilated, and vision being confused. The pulse was small and irregular, and lassitude was complained of. From this time she rapidly recovered. The patient stated that a quarter of an hour after she had taken the atropine, she was seized with nausea and dimness of vision; while she was unable to feel her legs and arms: alarmed, she repented of her deed, and called for aid. M. Roux was enabled to detect the atropine in the urine by M. Bouchardat's test—iodised hydriodate of potass.—*Journal de Chimie Médicale*, 1860, p. 529.

FOREIGN CORRESPONDENCE.

GERMANY.

Bonn, January 21.

From papers recently published in the *Medical Times and Gazette*, as well as in other English Medical Journals, there still seems to be much diversity of opinion among English oculists on the value of iridectomy in certain eye diseases; and, perhaps, your readers may, therefore, be interested in some account of the results of that operation as performed by Dr. Busch and C. O. Weber, Professors of Clinical Surgery at this University. Since the invention of the ophthalmoscope by our illustrious countryman, M. Helmholtz, no subject has occupied the minds of German oculists so much, and has elicited so many different opinions as that of coremorphosis and the effect of iridectomy as an antiphlogistic remedy in internal inflammations of the eye. It is true that it was for some time known, that the evacuation of the aqueous humour will effect a considerable amelioration in cases of obstinate choroiditis, especially if there are serous exudations with expansion of the bulbus; but the circumstance that the operation had to be often repeated and that relapses were frequent, rendered the effect uncertain, and, therefore, the propriety of resorting to it doubtful. It was also observed that, when the cornea was ruptured and prolapsus of the iris took place, a striking remission of the inflammatory symptoms generally resulted. These facts and the observation, that iridectomy performed for posterior synechiæ when the inflammation had not yet subsided, exercises a very beneficial influence in shortening the latter, led Dr. A. von Graefe to the conclusion that iridectomy might be advantageously performed not only in acute and chronic iritis, but also in certain destructive forms of keratoiritis, in acute choroiditis, and in that chronic form which still retains the not quite suitable name of glaucoma. The observations made at this University by the Surgeons just named, prove that iridectomy is a most important addition to surgical therapeutics, and is, in fact, in some instances, the only means of saving the eye, as the iritis almost instantaneously ceases after iridectomy has been performed. The result is equally beneficial in acute choroiditis; and also in chronic cases, with opacity of the vitreous humour, when the patients have been scarcely able to recognise the outlines of large objects, to distinguish fingers, or to read very large print, the Surgeons of Bonn have found that, soon after the operation, the patients are enabled to read very small print without difficulty. Similar results have been observed in cases of ulceration of the cornea which are connected with iritis, and which, if they take the form of deep-seated semicircular ulcers, threaten speedy destruction to the eye. In such cases, however, the operation requires to be repeated. Professor Weber has, in most of his cases, only resorted to iridectomy after the antiphlogistic remedies, and especially the administration of calomel, even to salivation, had failed; and the success has exceeded his expectations. The process of operation, although simple, nevertheless, requires great care. The incision should be an ample one, directed superiorly and internally, beyond the margin of the cornea, and nearly to the level of the iris, so that the ligamentum pectinatum iridis is severed. If there are no adhesions of the iris, it generally prolapses immediately, and there is no difficulty in seizing it. The segment of the iris should be rather large, and Mr. Hancock is quite in error when he says in his paper on division of the ciliary muscle in glaucoma, that all oculists agree that the smaller the quantity of iris removed, the better. On the contrary, small and incomplete excisions of the iris are rarely attended by striking success; and it is, perhaps, to this circumstance that the failures of some English oculists, who have only cut out infinitesimal portions of the iris, are to be ascribed. The segment of the iris should be completely removed up to the ciliary margin of the iris. Cutting of the cornea must be carefully avoided, as, if this be done, it is not possible to remove the iris up to the ciliary margin. Dr. A. von Graefe considers that the removal of the tension of the bulbus is the cause of the curative effect; and it is certainly true that, in the morbid conditions above mentioned, the intra-ocular pressure is so considerable, that the aqueous humour often spirts out with great force when the operation is performed. On the other hand, Mr. Schweigger, one of Von Graefe's pupils, holds that severing of the anterior tendinous insertions of the tensor choroideæ is most instrumental in effecting the cure, while the Surgeons of Bonn are of opinion that the effect is to be compared to that of an ample incision into any inflammed tissue, as for instance in panaritium, abscess, etc., when the inflammation generally subsides immediately afterwards. Iridectomy is also advisable as a preparatory operation for linear excision of cataract, as sometimes after the latter has been performed, a considerable tumescence of the fragments of the lens, and pressure on, and irritation of, the iris take place. The operation, which causes only a very slight wound, is scarcely ever followed by bad symptoms, so that the patients are generally able to leave their beds a few days afterwards. The enlargement of the pupil by the coloboma iridis and the disfigurement of the eye, upon which the opponents to this operation have laid so much stress, are scarcely perceptible if the incision is made superiorly and internally.

With regard to the operations for cataract, I may mention that German oculists have now almost entirely abandoned reclination, as they found that even in successful cases, where the patients could see very well for some time after the operation had been performed, after a few years blindness recurred; and in such cases the examination by means of the ophthalmoscope always showed that, where the lens had been placed, a choroiditis had set in, which again destroyed the sight. The results which are obtained by the ordinary extraction by a flap formed upwards for the hard cataract of old people, and by the linear incision for the soft cataract of young persons, are so satisfactory that other modes of operation are scarcely necessary. In thirty-five cases of extraction by flap, Professor Weber has only had two unfavourable results; and even these patients completely recovered the sight of the other eye. As to linear incision, the same Surgeon strongly recommends the operation to be finished as rapidly as possible, and to avoid bruising the edges of the wound by too diligently endeavouring to remove every small fragment of the cataract, as by such proceeding iritis may be induced.

As the question of curing cataract without operation has lately been again discussed in some papers which appeared in your columns on the "Prussian Oculist," the late Hofrath de Leuw, I think it will be interesting to your readers to hear that Dr. M. Langenbeck, of Hanover, has just

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now recommended a new process of curing cataract, which he calls "insolation," and which consists of the application of the concentrated rays of the sun to the lens. This is done by directing the focus of a burning-glass into the eye for several minutes, so that it falls exactly on the opaque lens; and he repeats this operation three times within a quarter-of-an-hour. He relates no less than nine cases in which he says that he has effected a cure by this means. As Dr. Langenbeck was the first to give the true theory of accommodation, and has also, together with his cousin, Professor Langenbeck, of Berlin, introduced the forcible extension of anchyloses into practice; the extraordinary process originated by him deserves to be subjected to a conscientious examination, although we are generally speaking fully justified in disclaiming all curative effects in cataract except by operation. Professor Weber has, therefore, instituted a series of experiments on rabbits, in which he first artificially produced an opacity of the lens by incision and then tried the effect of insolation; but he has never seen the slightest benefit to the lens result from it, while several of the rabbits which were operated upon have died of inflammation of the brain. We have therefore some reason to be cautious in applying this new process. The supposition that cataract may be cured without operation is not *à priori* unreasonable, as if it were possible to induce a fatty metamorphosis of the whole substance of the lens, a total absorption of it might be fairly expected; and it was perhaps this idea which induced the late Hofrath de Leuw to prescribe palm-oil for patients suffering from cataract; but even then there would be certain remains which cannot be absorbed, as cholesterine, the capsule of the lens, etc., and these would still require an operation for their removal.

Professor Weber has also recently made some microscopical observations on the intimate structure and inflammation of the corpus vitreum. He has found that this consists, even in the adult, of very delicate cellular elements, which it is very difficult to make clearly visible. These cells are analogous to those of the conjunctive tissue. Generally the nuclei only are to be perceived, and the outlines of the cells themselves disappear, as they flow together into the mucous substance; these outlines are only to be artificially reproduced by adding to the substance some salt-water, together with a few drops of nitric acid, or alkalies alone. Such a structure of the corpus vitreum as has been described by M. Hannover, does not exist; there are no septa, neither radial nor excentric; and that which was believed to be such, consists of fibrous elements, which run parallel to those of the corona ciliaris and keep the corpus ciliare together. Pus is formed by an excessive growth of the nuclei mentioned above, and not unfrequently the whole substance of the corpus vitreum may in this way degenerate into pus. Besides this, other inflammatory processes may take place in the vitreous humour; blood-vessels are formed, which proceed from the vessels of the retina and grow into the corpus vitreum; or there is fatty degeneration proceeding from the cells, and deposition of cholesterine, formation of fibres, and of thick fibro-cartilaginous masses, and even ossification. Thus Virchow's theory, that in a tissue which is quite devoid of vessels, inflammatory changes may occur just as well as in such which possess blood-vessels in abundance, has obtained a fresh proof. The morbid processes just mentioned may be produced by any kind of irritation, but they more especially follow traumatic injuries; and this is another reason why reclination should not be resorted to.

Dr. Max Schultze, who has recently been appointed Professor of Anatomy at this University, has just published some important microscopical observations on the intimate structure of the retina; among which I will only mention, that the retina is held together by a considerably developed structure of connective tissue, to which belong Müller's fibres, which were formerly believed to be nervous fibres, but are not so. In cases of Bright's disease, it is this connective tissue which first shows fatty degeneration; and many cases have been observed here, in which only the examination of the retina by means of the ophthalmoscope has suggested the existence of Bright's disease at a time when there were no other symptoms of this disorder to be perceived. In such cases the retina shows whitish masses of fat, which surround the optic nerve, and also numerous extravasations of blood. Thus the ophthalmoscope proves to be an important means of diagnosis even for internal diseases.

Before concluding this letter, I will mention some glycerine-ointments recently introduced into practice by Dr. Simon, of Berlin, and which have been amply tried here. They are prepared by mixing one part of starch with five parts of glycerine at a temperature of 70° R. (190° F.). These ointments have the advantage that they cannot become rancid, and they completely dissolve iodide of potassium, nitrate of silver, bichloride of mercury, alkaloids, extracts, etc. They are, in many cases, preferable to the common fat-ointments, and especially the glycerine-ointment of red precipitate has proved very useful in Ophthalmic Surgery.

GENERAL CORRESPONDENCE.

SPECIAL HOSPITALS.

LETTER FROM DR. ARMSTRONG TODD.

[To the Editor of the Medical Times and Gazette.]

SIR,—Having read your report of a meeting of the "Metropolitan Branch of the British Medical Association," held to consider the subject of Special Hospitals, I beg as a favour you will permit me to make a few remarks in your pages upon that meeting.

I do not desire to occupy your space in detailing the many advantages professional science and the public gain from Special Hospitals. I only suggest to Dr. Stewart and those other gentlemen who are opposed to these Institutions to visit the Ophthalmic Hospital in Moorfields, or the Orthopædic Hospital in Oxford-street, and also to compare the state of professional knowledge upon these specialities before such institutions were established, and now that they have done such good work.

But the Institution the annihilation of which is chiefly aimed at is the "Hospital for Stone and other Urinary Diseases," to which I have the honour to be one of the Surgeons. The principal opponents of this Institution at the above meeting were Mr. Webber, of the Hospital for Incurables at Norwich, and Mr. Henry Thompson; and my object in addressing you is to show to the Profession the utter worthlessness of the opinions expressed by these two gentlemen.

Mr. Webber, of the Hospital for Incurables, made the following proposition, "That it is not expedient to extend Special Hospitals, more especially as affects an Hospital for Stone." Now, Sir, this same gentleman called upon me some months back and spoke of establishing an Hospital for Fractures; and while moving the above resolution, he had the audacity in the same speech to tell the meeting that in 1857 he was anxious to establish an "Hospital for Genito-Urinary Diseases." Now, Sir, I wish to know what is the difference between an "Hospital for Stone and other Urinary Diseases," and an "Hospital for Genito-Urinary Diseases"?—or what are the altered circumstances that render such an Institution inexpedient in 1860, which in 1857 Mr. Webber thought so expedient, that he went about among his professional brethren asking opinions upon the project? He now seems to be annoyed that an Hospital for Stone has been established, to which he is not one of the Surgeons. Now, Sir, I shall turn to Mr. Henry Thompson: This gentleman is well known to be the instigator and chief actor in the opposition to the Hospital for Stone. He was promoter of, and Secretary to, the Protest Committee, and at the meeting on Wednesday he proposed a resolution, "That the establishment of Special Hospitals for the reception of cases which are at present treated with unremitting care and interest in the existing General Hospitals, and for which ample provision is there made, is not only unnecessary, but very prejudicial to the interests of the patient, the Profession, and the public." He had appended to it, "It appears from the foregoing that the establishment of the Hospital for Stone and Urinary Diseases is especially unnecessary and undesirable." The first part of this resolution may be somewhat vague, but the appendage expresses in strong terms a decided opinion; and that opinion of Mr. Thompson is, that an Hospital for Stone and other Urinary Diseases is especially unnecessary and undesirable. Nevertheless, it is a fact that this gentleman was one of the first who entertained the idea of founding an Hospital for this class of diseases; and the prospectus which I enclose *was drawn*

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up by him, and, with some slight modifications, sent to every Member of both Houses of Parliament, and other influential people. There can be no breach of confidence in publishing in your columns a document so widely circulated.

"St. John's Hospital for Stone.

"The great progress of Medical Science, since the commencement of the present century, is the result of laborious study applied to particular diseases. Thus, among Physicians, inquirers, by concentrating their powers, each upon a favourite topic, have greatly advanced our knowledge, for example, of the diseases of parturient women, of children, of diseases affecting the lungs, the nervous system, and other particular organs. Surgeons have also largely contributed to the same object, by specially studying the diseases of the eye, of the skin, deformities of the limbs, etc.; while long and patient devotion to another and most important branch of Surgery has produced one of the greatest discoveries of modern times, viz., the removal of stone, that most formidable of human maladies, without recourse to the knife.

"Yet, while in London there are 6 Charitable Institutions for idiots and lunatics, 9 for lying-in women, 4 for women and children, 7 for diseases of the eye, 2 for diseases of the ear, 4 for diseases of the chest, 2 for diseases of the skin, 5 for deformities, 1 for cancer, 1 for fistula, 1 for fever, 1 Lock Hospital, and 3 vaccine institutions, there is no Hospital specially appropriated to the treatment of Stone.

"It is now proposed to supply the existing want, by founding an Hospital for the reception of patients labouring under Stone and other Diseases of the Urinary Organs. If there be one class of maladies requiring more of special attention and appliances than another, it is this; particularly where the object is to substitute, as much as possible, lithotrity for lithotomy—the crushing for the cutting operation. Although lithotrity is not applicable to all patients, it is so to very many of those now cut in the Hospitals of this country. It has replaced the knife, and, with the happiest results to life, in the principal continental capitals. It is applied to those patients in this country who are able to afford the necessary attendance, and with a like success. But the poor rarely obtain the advantages of lithotrity in our public Hospitals. Without discussing the causes of this anomaly, its existence must be regarded as indisputable.

"But on this subject the Committee would refer to the opinion of Sir Benjamin Brodie, as recorded in the most recent production of his pen. After a long and extensive experience of both operations, that distinguished Surgeon says:—'My own experience has certainly led me to the conclusion that lithotrity, if prudently and carefully performed, with a due attention to minute circumstances, is liable to a smaller objection than almost any other of the capital operations of Surgery. The cases to which it is not applicable are very few indeed, and they are chiefly those in which, from the calculus having attained an unusual size, the danger and difficulty of lithotomy are so great, that no Surgeon would willingly, nor otherwise than as a matter of duty, undertake it.' Sir Benjamin Brodie has also shown that the deaths in the London Hospitals among adults cut for stone equal or exceed the recoveries; but out of 115 cases in which lithotrity had been performed in his private practice, there were only 5 in which death was the result of the operation. Yet lithotrity is very seldom performed in our General Hospitals, and the results, when it is performed, are believed to be quite as unfavourable as those which follow lithotomy. These facts prove beyond dispute the necessity of encouraging the establishment in this country of an Hospital for Stone.

"The grand object of this Institution is to afford to the subjects of stone, among the indigent of both sexes, all the means and appliances necessary to its successful removal by lithotrity.

"A second, is the treatment of urinary complaints generally, such as stricture and diseases of the kidney, in an institution where the patients are not subjected to the publicity inseparable from attendance on a General Hospital, and by which, it is well known, that numerous sufferers are deterred from seeking relief, often incurring fatal consequences from the delay.

"A third, is to admit patients who possess some, although slender resources, to private and separate wards, on consideration of their making a small payment as an equivalent for the cost of board and lodging. The abuse of public charity in connexion with the Hospitals of London is acknowledged to be extremely great; a large portion of the funds designed for the destitute and suffering poor being applied to those whose means ought to exclude them from accepting the gratuitous supply of medicines and other appliances from a public charity. This great evil arises in some measure from the want of a systematic provision in these charities for those who would willingly become supporters, to a small amount, of the institution from which they derive Medical assistance. It is proposed, therefore, as one of the objects of the Hospital, to admit freely such as are absolutely necessitous; but to require a small weekly payment from those who, although not in circumstances to make an adequate remuneration for the professional attendance required by such cases at their own homes, are able and willing to afford a moderate contribution to the charity.

"Donations and subscriptions in furtherance of the object will be received by the Honorary Treasurers, Sir Samuel Scott, Bart., and Co., No. 1, Cavendish-square."

It is thus seen that Mr. Thompson, a short time ago, endeavoured to found an Institution under the name of "St. John's Hospital for Stone," and in his prospectus advocated in strong terms the establishment of an institution having for its object the special study of this class of disease; and, after deploring the want of an Hospital for Stone and other Diseases of the Urinary Organs, he writes the following statement:—"If there is one class of maladies requiring more of special attention and appliances than another, it is this;" and, a little further on, Mr. Thompson circulates the following statement:—"The poor rarely obtain the advantages of lithotrity in our public Hospitals." These quotations are from the pen of this very Mr. Henry Thompson. Now, Sir, the honourable members of our Profession must, from this, come to one of two conclusions,—either that Mr. Thompson widely circulated for his advantage statements which he believed to be untrue, or that he is now opposing an Institution which he believes will prove beneficial to the advancement of Medical Science, to the public, and to the poor. It is hard, Sir, to have to expose a Professional brother so openly, and those connected with the Stone Hospital have hitherto borne the insults heaped upon their charitable endeavours in perfect silence; but when a man, after having in strong terms publicly advocated, apparently with disinterested motives, the establishment of a Medical charity, and, through want of influence, having failed in the undertaking, now designates the accomplishment of his own previous object by others more favoured, as "especially unnecessary and undesirable," it is right the Profession should know the truth.

It is a matter of little importance to the Profession what Mr. Webber or Mr. Henry Thompson may think of the Hospital for Stone: but we do value the good opinion of our professional brethren who have no adverse interest in the matter; and we trust that when the motives of our most active opponents are justly appreciated, the hasty judgment, published without due consideration, will be reversed.

I am, &c.

Armstrong Todd.

16, Old Burlington-street, February 4.

PROFESSION *versus* TRADE.

Letter from Mr. Raymond.

[To the Editor of the Medical Times and Gazette.]

Sir,—As you have lately been discussing at considerable length a subject which concerns every member of the Profession, I appeal to your fairness and courtesy to insert some observations bearing upon the question, though differing somewhat from your own view.

The question of the standing and organisation of the Medical Profession, as treated in the *Medical Times and Gazette*, is clearly divisible into two parts—the conduct and capacity of the Apothecaries' Society, and the dispensing of drugs by the General Practitioner. Your own concise heading, "Profession *v.* Trade," is consistently paraphrased in the article which follows it; but both seem to me to miss some of the main points of the question at issue, and I hope to show that whether the practice of dispensing drugs be

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objectionable or not, it has not the limited interpretation implied in your article.

You have stated fairly enough the merits of the Apothecaries' Society, but, in considering its qualifications, it should be judged by its present power for good or evil, and not by imaginative reviews of its origin or by curious and historical references to the dirty work of the old Apothecaries. Surely, there is nothing in common with a respectable Licentiate of the Society in the present day and those "ancient parties" whom you have ridiculed, but the name? Your argument, therefore, is weakened, rather than otherwise, in its very foundations. Had the Association originally applied to Parliament under a more fortunate name (the College or Society of Medical Practitioners, for instance) instead of perpetrating in its title a silly vulgarism, the good that it has accomplished would not only have been ample and sufficient to preserve it from dissolution, but would have made the new start just taken by the College of Physicians an absolutely hopeless move. But whatever the Society might have been called at the outset, it may be taken for granted that any Medical Association formed for the purpose of government and organisation must have made provision at that time for the dispensing of drugs by its Associates. It is equally certain, too, that should the College of Physicians acquire the function of making a family Doctor, it will only do so at the cost to itself of a concession of that kind. No bill would get through Parliament which would deprive the public of their right to get their medicine where they chose, and unless the College is prepared for this contingency, it might as well relinquish the contest.

To the Apothecaries' Society alone is due the whole of the Medical knowledge by which (in respect of the General Practitioner) the English public have profited in this generation. Neither Parliament nor the Bench of Judges will forget this fact whenever the promised fight comes off; nor does it matter whether the improved attitude of the College of Physicians is an act of condescension or of repentance—their previous inaction is sure to tell against them.

It is unquestionably a pity that no single Examining Body has been organized to turn out a competent General Practitioner; but, since two are necessary, the choice is certainly in favour of a co-operation between the Colleges of Physicians and of Surgeons. The former, however, has only lately recognized this fact, and though the Apothecaries have in a measure laid themselves open to their own menaced extinction, it should not be forgotten that, in the hour of need, they gave dignity to the Profession and security to the public. Their real weakness does not consist in giving an official sanction to the issue of drugs, or in apprenticeships, or in lowering the *status* of the Profession, but in their inability or disinclination to expand their powers, to meet the change and tendencies of the age. What they have failed to do it is naturally hoped some other body will accomplish, though the hope is not founded on experience. The listlessness of the Apothecaries in advancing the science of Therapeutics—which is in reality a reasonable complaint against them—should act as a warning to the Corporation whose enterprise and usefulness in the cause of Science have been hitherto mainly represented by the severe conciseness of the London Pharmacopœia.

Among other things, it has become the fashion of late to condemn the system of pupilage, or apprenticeship, required by the Apothecaries' Company; but its merits are simply a matter of opinion. No doubt the period of five years is much too long, but it is a gratuitous assumption to say that a moderate residence with a Medical man is "absolutely injurious." The lad is provided with a home at a very critical period of life; he has a practical acquaintance with drugs, and can combine with that a certain amount of elementary reading in his Profession and general literature. He will learn maxims and habits of private practice, which he cannot learn elsewhere, and which may be invaluable to him hereafter. I firmly believe that, *cæteris paribus*, a young man who has had two years' resident pupilage is more competent to begin private practice than one who has not, and that, throughout life, he would be, *quoad* this advantage, the more reliable Practitioner of the two.

The question of dispensing drugs is a very large one; but I will endeavour to be as brief as possible in the remarks that occur to me. The practice by no means depends upon the Apothecaries' Society, though it has been continued under their special sanction: but it is in part a conventional arrangement adopted alike by the public and the Profession of this country, and is in close relation to both. It is obviously impossible that the practice of "sending medicine" should escape being called a trade by those who disapprove of it; but it may fairly be regarded as a tangible medium of exchange between the Profession and its clients, the money-rate of which has so little relation to actual value, as to place it out of the category of trade. Medicine coarsely represents professional time and labour, and has been readily accepted in that sense by the public, who will not forego the many conveniences they derive from this interpretation of it. Educated people understand paying for time and skill—that is, for prescriptions, visits, or advice; but the great majority of people, being uneducated, require an outward and visible sign of benefits received; and this, in other respects, suits all parties so well, that it has grown into a system. It is the public who have dragged the Profession into whatever of trading habits it has fallen, because they have so long persisted in regarding Medicine as representing Professional skill; and it has been quite impossible for Medical men to pull against them. We may improve them and ourselves in the way the custom is to be worked, as indeed we have done; but the practice of supplying the medicines prescribed, is of itself by no means incompatible with our dignity and usefulness. It is, moreover, one which the public eminently like, and which has become a settled institution of household life in England, which, in proportion as it is worked honestly and with moderation, and simply as a convenient arrangement, is sure to be long maintained in this country under some form or other.

We look to you, Sir, to check the childish sensitiveness which is abroad respecting the *status* of the Profession, which depends, not in ceasing to supply medicine, but upon the education and personal character of its members. You have treated this matter moderately and courteously; but it is not so everywhere. The very large class of General Practitioners are not to be written or talked down by young gentlemen, whose only estimate of human affairs is made in fractions of a guinea, and who are anxious to puff everything up to that inflated standard. I am, &c.

Wimbledon, January 30. H. H. Raymond.

POOR-LAW MEDICAL REFORM ASSOCIATION.

Letter from Mr. R. Griffin.

[To the Editor of the Medical Times and Gazette.]

Sir,—I must again beg the favour of your affording me space in your Journal to inform the Poor-law Medical Officers that I have amended the Bill in accordance with the suggestions of the greater number of those officers who have obliged me with their opinions.

I have also added a superannuation clause to come into operation after not less than ten years' service, should the officer resign from any infirmity of mind or body, which would render him incapable of performing his duty. This clause has been inserted in consequence of my having ascertained that 300 Poor-law Medical Officers resigned last year, and that out of this number the names of sixty-five appear in the obituary—a frightful mortality—and no doubt some of the survivors gave up their appointments owing to illness rendering them unable to perform their duties. Since November last I have received from sixty Medical officers subscriptions amounting to £28 7s. which will about cover the expenses incurred up to that time, it is, however, desirable that the Bill should be placed in the hands of a parliamentary draftsman to prevent its being thrown out on technical grounds: for this purpose, I am informed, £20 at least will be required; and as we are sure to meet with very considerable opposition from Boards of Guardians, and possibly even the Poor-law Board, it is extremely desirable that the facts, quotations and arguments in favour of the Bill should be printed and forwarded to each Member of Parliament,—but to do this requires pecuniary support. I have forwarded a copy of the amended Bill to Mr. Pigott, with a request that he will favour me with the name of the Hon. Gentleman into whose hands he proposes to place it; but in case Mr. Pigott should fail, it would be well to be prepared for the contingency; if, therefore, any gentleman

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should know a Member of Parliament who will undertake the charge of the Bill and will favour me with his name, I will supply him with the requisite information.

I am, &c.

12, Royal Terrace, Weymouth, January 26, 1861. RICHARD GRIFFIN.

P.S.—A copy of the amended Bill shall be forwarded to all who have subscribed within the last six months, and to any gentleman who may shortly send a remittance in aid of the cause. I regret the state of the funds will not permit me to do more.

ONLY A DOCTOR.

LETTER FROM MR. HENRY USSHER.

[To the Editor of the Medical Times and Gazette.]

SIR,—The editorial remarks relative to the status of the Medical Profession in your Journal for January 19 will call forth the response from many that it is but too true, too faithful, a portrait of things as they are, but not as they should be. But there is one cause which more than any other has contributed to this end, and that is the connexion of the Profession with the sale of drugs. It is a mill-stone about our necks, a trade-mark that eschews everything but money, and with such an object attainable it knows and can know nothing else.

The system of charges for Medicine has got a certain hold on the General Practitioners in England, it appears on every "little bill" as a necessary element, the very idea of paying for advice is unsatisfactory to John Bull, who must have something tangible in the shape of pills, draughts, etc., for his money; but he knows no better, and we may thank ourselves for this very flourishing state of affairs. Hence we General Practitioners come to be viewed through a double medium; as tradesmen who sell drugs, and yet something which would be better were it not for this self-imposed difficulty. It is from this source that homœopathy has sprung, and thirty years ago or more, when the bills of Apothecaries for Medicine were as notorious as lawyers' now are, the germ of this precious craft was springing into existence; it was but a necessary re-action, a protest from overloaded stomachs, that they would take no more stuff, for which the owners had to pay, and dearly too. The public may be humbugged, but they will be drugged no longer.

Having had some connexion with the sale of drugs myself, I speak more feelingly on the matter, nor shall I soon forget a remark made by a domestic who came to my Surgery and demanded something not in use, I said to her, "I am not a Chemist," and her sharp reply was, "If you are not, you have no business to sell medicine."

If the advice of A or B is not worth paying for, it is not worth having. Let us by all means have our medicines at hand for dispensing if we will, but save the little honour we possess, and assert our dignity by payment for services only; nothing else can raise us to the same level with other liberal professions. Custom will force the public into anything, and in the end they will see how much better it is to pay for skilled labour than leave the reflection to their attendant, that the more he physics them the better for himself, the worse for themselves. How much better would it be for us as a body to receive a fee for advice according to the social status of the patient; perhaps small, but more willingly paid and repeated too, than to add on by means of physic, and have payment shirked by every means that the shuffler and swindler can devise! The usual heading, "Professional attendance and medicine," so much, is highly unsatisfactory to patients.

He is a Doctor, and a Doctor only,
Who, walking in the path of science lonely,
Lays up a store of that peculiar teaching
Which stands his friend, much more than all the preaching
Of learned *savans*, who have acquir'd their lore,
Purloin'd from the same source, that years before
Sprang from the brains of honest, humble labour,
Now sold as *new* by parasites for favour.
Worthy the Doctor who, with torch in hand,
Gathers the atoms, countless as the sand,
That make *a fact*, and on the cairn of Science
Leaves it for future use, with self reliance.
Patient disciple, *of* thy noble art,
Taught by the unstain'd love that swells thy heart!

I am, &c.

HENRY USSHER, M.B.

Chartham, near Canterbury, January 29.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

TUESDAY, FEBRUARY 5, 1861.

DR. COPLAND, President, in the Chair.

Mr. MARGETSON exhibited a specimen of

STRICTURE OF THE DESCENDING COLON.

It was taken from a woman who died at the age of 63. She had been ill several months with constipation, pain and distension of the abdomen. She had scarcely any vomiting, never fæcal, and her food appeared to be digested and assimilated. There were never any signs of inflammation. The position of the obstruction was diagnosed during life.

Dr. COPLAND remarked on the peculiarity of the case, there being for some time an impermeable obstruction and yet no fæcal vomiting.

In reply to Mr. Spencer Wells, Mr. MARGETSON said that an operation for opening the colon in the loin had not been contemplated.

Mr. ASHTON had seen several cases in which there was complete obstruction in the large intestine, and no fæcal vomiting.

Dr. GIBB alluded to a specimen brought before the Society three years ago by Dr. Wright. In this case there was sticture of the colon. There had been no fæcal vomiting during life.

Dr. LEARED then exhibited a specimen of

CANCER OF THE ŒSOPHAGUS AND CARDIAC END OF THE STOMACH.

The patient was a man, aged 56, and had been in perfect health until about six months before death. His symptoms for the first three months were very slight, but afterwards he became rapidly worse. Dr. Leared had on several occasions examined by the microscope the matters vomited from the stomach, but never succeeded in finding any cancer cells. He succeeded, however, in finding them in some mucus which the patient brought up.

Dr. LEARED also exhibited several small

URIC ACID CALCULI.

They were very small, the largest being about the size of a small pea. They were expelled from the bladder during a fit of coughing. The patient was a man, aged 70, and had never had any other symptom of calculus.

Dr. BRISTOWE then exhibited a specimen of

PSEUDO-COLLOID OF THE OVARY.

He brought it forward in order to place it in contrast with the specimen exhibited by Dr. Dickinson at the last meeting. It was taken from a woman, aged 62, who had had ovarian disease for a considerable period. She was tapped, but only a small quantity of thick, viscid material was obtained. She died suddenly, and after death several quarts of gelatinous matter were found in the abdominal cavity. It was found that this material came from an opening in one of the ovarian cysts. There was a good deal of inflammatory exudation in the peritoneal coat of the intestines, in which the gelatinous matter was infiltrated. Both ovaries were diseased, and the cysts extended to the broad ligament.

Dr. Dickinson, Dr. Wilks, and Dr. Bristowe, were then appointed to report further on Dr. Dickinson's specimen.

Mr. SPENCER WELLS exhibited

THREE OVARIAN TUMOURS SUCCESSFULLY REMOVED BY OVARIOTOMY.

1. The first was a fresh specimen removed at the Samaritan Hospital, on the 22nd inst, from a married woman, 54 years of age. She had been tapped twice, but secondary cysts growing rapidly, ovariotomy was decided upon. The mass of secondary cysts exhibited weighed upwards of eight pounds, and about twelve pounds of fluid had been removed from some larger cysts. The tumour had been extensively adherent, both to the parietes and to the omentum; but the

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patient had not had a bad symptom since the operation. 2. This was a dried specimen removed from a private patient, 41 years of age, in July last. The emptied cysts had weighed about four pounds, and the fluid they had contained about 22 pounds. Very extensive parietal adhesions had to be broken down; but the patient recovered well, and was now in perfect health. 3. This specimen showed the results of inflammation of the lining membrane of the cyst with flakes of adherent lymph, which had followed the second tapping in a single lady, 36 years of age. Ovariotomy was performed in July, 1860. There were no adhesions. Recovery had been complete, and the lady is now in perfect health. Mr. Wells added, that the patient, 53 years of age, from whom he had removed an ovarian tumour in October last, and which he had shown at an early meeting this Session, was now quite well and strong. He had shown at this Society *all* the cysts and tumours he had removed; up to the end of last Session he had exhibited 17. The result then was 10 recoveries and 7 deaths; but the 4 cases since had all recovered, and the recoveries were now 14 to 7 deaths,—a mortality he hoped to see still considerably diminished.

Dr. Copland remarked that when he wrote on ovarian disease he had deprecated ovariotomy; but that he now considered it to be frequently the best method of dealing with the disease.

Dr. Schulhof mentioned a case in which a patient had had an ovarian tumour for twenty years. The tumour was removed after death, and was exhibited before the Society by Mr. Spencer Wells. Dr. Schulhof would ask, if, considering that a patient's life might be protracted so long, ovariotomy was always justifiable?

Dr. Gibb alluded to an ovarian tumour he had exhibited, which weighed one hundred and six pounds, and remarked that ovariotomy was much more fatal in General Hospitals than in private practice or in the Samaritan Hospital.

Mr. Spencer Wells considered that Dr. Schulhof's specimen showed most conclusively the advantage of ovariotomy. There were no adhesions—there was a long pedicle, and the tumour might have been removed through a small incision. The patient's life had been one of continued discomfort, and it was quite exceptional that life should be so much prolonged. The average duration in ovarian disease, after attaining any considerable size, was not more than two or three years.

Dr. Copland then mentioned the case of a lady, aged 80, who had a large ovarian tumour, and still took daily exercise. He considered, however, that such a case was quite exceptional.

Dr. Montgomery then showed two specimens of

ACCESSORY PANCREAS.

One was taken from a patient, aged 42. It was situated just beneath the peritoneal coat of the jejunum. The structure was identical with that of the pancreas. The other specimen was one described by Dr. Bristowe. It was taken from the middle of the ileum. It was three-quarters of an inch across, and one thick.

Dr. Weber then exhibited a piece of intestine from a a patient who died of

TYPHOID FEVER.

The patient died fifteen weeks after the commencement of the fever. After death there was found suppuration in the parotid gland and an abscess in the pancreas. There was also ulceration of the intestines. Dr. Weber drew attention to the fact that there had been a profuse flow of saliva. He had once before seen a case in which there was suppuration of the parotid and also abscess in the pancreas.

Royal Institution of Great Britain.—At the general monthly meeting, held on Monday, February 4, 1861, Sir Henry Holland, Bart., M.D., F.R.S., was elected a Manager of the Royal Institution, in the room of Sir Charles Fellows, deceased.

Violent Deaths in New York in 1860.—During 1860, 116 persons died by violence in the City of New York,—59 being recorded as homicides, and 57 suicides; 24 of these last accomplishing their death by means of poison.

LEGAL INTELLIGENCE.

MEDICAL TRIAL.

George Creed *v.* W. Dunn Gardner.

This was a case arising out of the inquest and inquiries which gained so much notoriety at Fordham, and was tried at the Soham County Court on the 26th of January last.

Dr. Mead, of Newmarket, proved,—That he attended a lady in her confinement, that the child only lived about fourteen days, and that he was satisfied with the cause of death, but withheld the burial certificate at defendant's request, who said he should demand an inquest. Defendant went with him to the Coroner; that the Coroner asked defendant if he would guarantee expenses, which was consented to by the defendant, who requested the assistance of a second Medical man, and said he would pay his expenses.

The plaintiff proved,—That he was a Consulting Surgeon, residing in Bury, that Dr. Mead, in the spring of last year, wrote, requesting his attendance at an inquest at Fordham, that he assisted during the post mortem examination, and afterwards attended the inquest, that he made two journeys, for the whole charged eight guineas, and that these charges were fair and reasonable. Further, he had sent the account to the defendant with a note requesting payment, but he received no reply.

The defendant proved,—That Dr. Mead had called upon him, when he stated the child had died under peculiar circumstances, and that he did not like to certify for the burial, but suggested an inquest. Afterwards, he went with Dr. Mead to the Coroner, and agreed to guarantee the usual expenses. The Coroner then filled up a form calling together a jury, which was sent to the constable at Fordham. The defendant denied having suggested the inquest, or having requested Dr. Mead to write to the plaintiff.

The Judge, after hearing the solicitors on both sides, almost immediately gave his verdict for the defendant: whereupon the plaintiff's solicitor asked for a nonsuit, but the Judge said he had pronounced judgment. Parties might apply, in the usual way, for a new trial, but he should not encourage such an application, as he thought in the interval they would be better advised.

MEDICAL NEWS.

Royal College of Physicians.—At the Comitia Majora Extraordinaria, held on Thursday, January 31, the following gentlemen, previously extra-Licentiates of the College, were admitted Members:—

Name.	Degree.	Residence.
Mahor, H. W.		Westport, Ireland.
Topham, John	M.D.	Wolverhampton.

Apothecaries' Hall.—The under-mentioned gentlemen passed their examination in the Science and Practice of Medicine, and received Certificates to Practise on Thursday the 31st ult.:—

Bennett, William Ford, Bath, Somerset
Caldwell, William Townley D., Harleyford-place, Kennington
Colquhoun, Archibald Grant, Risely, Bedford
Edwards, Walter, Bampton, Devon
Harvey, Charles Hamilton
Hollinworth, John, Newton Moor, near Hyde, Cheshire.
Hume, Henry, Newcastle-on-Tyne
Huntley, Robert Elliott, Howdon, Northumberland.

The following gentlemen also on the same day passed their First Examination:—

Catt, Charles Verrall, Bartholomew's Hospital
Grabham, Michael C., Rochford, Essex
Hughes, David Walkin, Ruthin, North Wales
Robinson, Haynes Sparrow, Bartholomew's Hospital.

APPOINTMENTS.

Hudson.—Alfred Hudson, M.B., T.C.D., Fellow of the King and Queen's College of Physicians in Ireland, has been elected Physician to the Meath Hospital and County Dublin Infirmary, in the room of Dr. Lees, resigned.

Greenhalgh.—Dr. Greenhalgh has been elected Physician to the Samaritan Hospital, in place of Dr. Priestley, resigned.

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PULVIS JACOBI *VER.*, NEWBERY'S.

To the Medical Profeſſion of Great Britain and Ireland.

GENTLEMEN,—We beg to call your attention to the following extracts from a Paper by the late John Cheyne, M.D., F.R.S.E., M.R.I.A., Phyſician to the Hardwicke Fever Hoſpital, Dublin, and Phyſician-General to His late Majeſty's Forces in Ireland, &c. &c., contained in the "*Dublin Hoſpital Reports*," *vol.* 1, *p.* 317.

"Since this caſe came into my poſſeſſion, I have been led to "make a good many clinical experiments, which have enabled me "to verify the reports which I had heard of the efficacy of JAMES'S "POWDER, in ſometimes removing the APOPLECTIC DIATHESIS in "perſons advanced in life. It is, moreover, worthy of obſervation, "that JAMES'S POWDER has been of remarkable utility in "certain inſtances of DETERMINATION OF BLOOD TO THE HEAD, which "occurred at an early period of life, and threatened to end by "effuſion. Laſtly, in two caſes of GENERAL PLETHORA, in which, "however, the head was more affected than any other part, "JAMES'S POWDER was exhibited by me with perfect ſucceſs."

Alſo *vol.* 1, *p.* 320.

"The following very ſimple method of exhibiting JAMES'S "POWDER, in caſes of undue determination of blood to the "head, is that which I have generally purſued. The patient is "made to begin with a very moderate doſe, not more than two "grains at bedtime, and to increaſe the doſe by half-a-grain every "night, until ſome ſenſible effect is produced upon the ſtomach, "bowels, or ſkin. Should the ſtomach be affected with ſickneſs, "the doſe muſt be leſſened by one grain on the following night. "By the addition of a little rhubarb to it, a larger quantity of "JAMES'S POWDER may be adminiſtered than the ſtomach could "otherwiſe bear. If the ſkin is ſoftened, or the bowels affected, "the doſe ſhould not further be increaſed, but it muſt be repeated "every night for a conſiderable length of time: in ſeveral inſtances "I have known eighteen or twenty grains taken for a conſiderable "period without any inconvenience."

The following extract (ſhowing the increaſing eſtimation in which the true Dr. James's Powder is held by Medical Practitioners) is taken from "The Lumlæan Lectures," 1858-59, delivered before the Royal College of Phyſicians, by A. Tweedie, M.D., Phyſician to the London Fever Hoſpital, who is admittedly one of the higheſt practical authorities on the ſubject of Fever. He ſays, ("*The Lancet*," *June* 16, 1860, p. 590,) as follows:—

"If the febrile excitement be ſuch as to require antimonial prepa-"rations, a pill containing 2 or 3 grains of James's Powder (prepared by "Newbery ſhould be taken at intervals according to circumſtances."

In writing to Meſſrs. Newbery, he ſays:—

"I wiſh that your preparation was always uſed."

To ſecure the diſpenſing of the *original* preparation, which, for 114 years, has been ſold by the houſe of Newbery and Sons, in St. Paul's Churchyard, it is neceſſary to preſcribe it as "PULVIS JACOBI VER., NEWBERY'S," otherwiſe another article (wanting in the beſt properties, and recommended to be given in a different code of doſe, *though called by the ſame name*) may be ſubſtituted for the original medicine.

This ſubſtitution muſt bring diſappointment, and of courſe deter Practitioners from preſcribing Dr. James's Powder, or lead them to regard it as a preparation on which no dependence can be placed.

FRANCIS NEWBERY AND SONS.

45, *St. Paul's Churchyard, London.*

Prices for Diſpenſing ½ oz. Bottle, 3*s.* 4*d.*; 1 oz. 5*s.*
Uſual Diſcount to the Profeſſion.

Savory & Moore's New Remedies, &c.

TINCTURE of ACTEA RACEMOSA, prescribed by Professor Wilson in Puerperal Hypochondriasis and Depression, Acute Rheumatism, &c.

CONCENTRATED ESSENCE of SUMBUL, for Nervous Disorders, Epilepsy, Spasms, Cramp, &c. &c.

The HYPOPHOSPHITE of QUININE, of IRON, and of QUININE and IRON, in Scales.

SYRUP of HYPOPHOSPHITE of QUININE, of IRON, and of QUININE and IRON. (Originated by Savory and Moore.)

COMPOUND SYRUP of PHOSPHATES, or Chemical Food, and all other Syrups of Phosphates, Biphosphates, Per and Superphosphates, which are of any Medicinal value.

☞ The above Syrups, being guaranteed not to crystallise, are especially adapted for Exportation.

CARBONATE of LITHIA, PYROPHOSPHATE of IRON, OXALATE of CERIUM, EXTRACT of INDIAN HEMP (prepared to order by Messrs. Scott, Thomson and Co., Calcutta).

COD-LIVER OIL with QUININE, COD-LIVER OIL with IODIDE of IRON, and other genuine Medicated Cod-Liver Oils.

The New EYE DOUCHE, invented by SAVORY & MOORE (and impressed with their names) possesses advantages which are not to be met with in any other form of Douche.

143, New Bond-street, London.

Chlorodyne.—J. T. Davenport

begs to direct attention to the disgraceful and fraudulent practice of certain parties, who apply the term "CHLORODYNE." to compounds of THEIR OWN MANUFACTURE, WELL KNOWING that the word is applied to a remedy SOLELY DISCOVERED and INTRODUCED by Dr. J. COLLIS BROWNE, M.R.C.S.L. (late Army Medical Staff), the formula of which is confided to J. T. DAVENPORT, and NONE other;—hence the assumption of the title, claim to discovery, or manufacture of CHLORODYNE by any othe persons is a direct palpable deceit and imposition.

The Medical Testimony, published on the extraordinary properties of this remedy, is exclusively applied to

DR. J. COLLIS BROWNE'S CHLORODYNE.

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CARBONATED.—LITHIA with POTASH and LITHIA with AMMONIA HOGG'S Citrate of Potash, and Citrate of Potash and Iron Waters.

HOGG'S Protocarbonate of Iron Water, and Ammonio-Phosphate of Iron Water.

These Waters are prepared as prescribed by Drs. Garrod, Owen Rees, and Bird; they are strongly effervescent, very agreeable, and contain an ordinary dose of their respective ingredients.

Also Potash Water, containing 20 grs. of the Bicarbonate; Soda Water, 15 grs.; Seltzer, Vichy, and Pullna, from correct analyses.

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Aerated Lithia Water. — Messrs.

BLAKE, SANDFORD, and BLAKE are prepared to supply the LITHIA WATERS (of which they were the original manufacturers under Dr. GARROD'S instruction) of any strength prescribed by the Profession for special cases. Those in constant use contain 2 grains and 5 grains in each bottle, either by itself, or combined with BICARBONATE of POTASH or PHOSPHATE of AMMONIA.

The following Waters as usual:—Potash, containing 18 grains of the Bicarbonate in each bottle; Citrate of Potash, 30 grains; Soda, 15 grains; Ammonia, 10 grains; Seltzer and Vichy from their respective analyses; and a very delicious, as well as useful, MINERAL ACID WATER.

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6 & 8 oz., any shape, plain or graduated	clear	8s. per gross.	
3 & 4 oz., do.	do.	blue tinted	7s. 6d. do.
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1 oz. do.	do.	of a very superior quality.	5s. 6d. do.
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6 and 8 oz., any shape, plain, or graduated	clear	8s. per gross.	
3 and 4 oz. ditto	ditto	blue tinted	7s. 6d. do.
½ oz. Moulded Phials			4s. 6d. do.
1 oz. ditto		of a very superior quality.	5s. 6d. do.
1½ oz. ditto			6s. 0d. do.
2 oz. ditto			7s. 0d. do.

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PERCIVAL'S LECTURES ON THE VETERINARY ART.—So far from contagion being the common cause of glanders, Professor Coleman estimates that not one horse in 1000, or even in 10,000, so receives the disease. The poison of glanders is bred and diffused in an atmosphere rendered impure by repeated respiration and by gaseous impregnations from the dung, urine, and perspiration emitted in hot and foul stables. In the degree in which a stable is foul and heated from want of ventilation, we find its inhabitants the subjects of glanders farcy, ophthalmia, etc., where there are no sewers to carry off the ordure, and the men plug up every crevice to stop the admission of air. There are several diseases affecting the human subject, that according to general opinion can only be generated by contagion: when a person has contracted any one of these, it is said that he has been in the vicinity of contagion or infection, and it may be impossible to prove the contrary; but what was it that first bred these disorders?—Vol. iii. p. 826.

DEATH.

TIEDEMANN.—This venerable Physiologist has just died at Munich, at the age of 87.

VITAL STATISTICS OF LONDON.

Week ending Saturday, February 2, 1861.

BIRTHS.

Births of Boys, 1049; Girls, 1001; Total, 2050.
Average of 10 corresponding weeks, 1851–60, 1738·9.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	768	776	1544
Average of the ten years 1851-60	623·0	611·8	1234·8
Average corrected to increased population..	..	..	1358
Deaths of people above 90	..	..	..
Deaths in 15 General Hospitals	65	28	93

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1851.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	376,427	..	9	4	8	12	3	9
North ..	490,396	..	7	6	2	22	3	4
Central ..	393,256	1	14	1	1	18	5	1
East	485,522	5	7	5	4	26	2	2
South ..	616,635		3	5	2	13	8	7
Total.. ..	2,362,236	6	40	21	12	91	21	28

TO CORRESPONDENTS.

Mr. Edwards's letter shall appear next week.

T. R.—The account of the accident to Dr. Ringer is hardly suited to these columns, as no Medical question of interest arises from it.

If *Mr. George Brown* will send his address, a private note shall be directed to him.

W. G. K.—In such a case as that described the squinting could in all probability be cured. The family Medical attendant should be consulted.

BELLADONNA.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Can you or any of your readers tell me why, when, and where Deadly Nightshade was first called Belladonna? I am, &c.

W.

BLACK EYE.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In answer to "Frigos," I beg to state that a poultice of black bryony root (the pugilist's remedy), or a lotion of diluted tincture of arnica, are very efficient remedies in removing black eye.

Cheltenham, February 6 I am, &c. R. S. SISSON, M.D.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In reply to the inquiry of "Frigos" in your last impression, as to the best means of removing the discoloration arising from contusion, I beg to draw his attention to tincture of arnica, which I have been in the habit of using for a length of time, with the best possible results.

I am, &c.

90, Leeson-street, Dublin, February 6. J. METGE BARRY, M.D.

THE VALUE OF MEDICAL TITLES.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—A friend of mine, a young Surgeon, the domestic Medical attendant of a certain noble lord, was sojourning in the country at one of the noble lord's noble friends. The hostess very politely, and with many apologies, asked my young friend to see one of her children who happened to be ill, but who was, at the same time, under the care of the Practitioner of the neighbourhood. The lady, however, excused herself by saying that she understood my young friend to be a Member of the College of Surgeons, while their own Doctor was, she believed, only a Fellow.

I am, &c. A FELLOW.

NEPENTHE.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—From press of occupation, Mr. Draper's inquires as to the Nepenthe used in the after treatment of the late Cæsarean operation escaped my notice. I now, however, have much pleasure in informing him that I selected nepenthe, because I thought it less likely to produce vomiting, in full doses, and I need not say that vomiting was to be avoided in this case while the wound was uniting. He will naturally enquire, Does this nepenthe give us the benefit of opium without its great drawback, sickness? I am unable to answer this question. I never myself use nostrums of which I do not know the composition or mode of preparation; but nepenthe was recommended to me some time since by a Medical friend, and I have used it largely in cases of cancer, phthisis, etc. The wife of a Medical friend, dying from phthisis, could not tolerate opium in any form, either Battley's or any other preparation. She took nepenthe at my suggestion, and, at first, it was of great service; but after continuing it for a time the old sickness returned, and the nepenthe acted no better than the others.

This subject is a very important one. All Practitioners must have been much distressed to find a substitute for opium (I use the word to include all the salts of morphia and all its ordinarily-known preparations) when its continued use produces sickness and head symptoms. The subject is worthy of investigation, and would well repay any man with the needful time and opportunities. I know of no means by which tolerance or intolerance can be predicated of a particular patient.

I am, &c.

Spital-square. JAMES EDMUNDS.

COMMUNICATIONS have been received from:—

Professor SIMPSON; Mr. PAGET; Dr. TROELTSCH, Würzburg; Dr. HASSALL; Mr. LE GROS CLARK; Dr. ANDERSON; Mr. SOLOMON; Mr. GRANTHAM; Mr. EDWARDS, Edinburgh; Dr. RINGER; and Mr. CHESSHIRE.

APPOINTMENTS FOR THE WEEK.

February 9. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's 2 p.m.; Charing-Cross, 1 p.m.

ROYAL INSTITUTION, 3 p.m. Dr. E. Frankland. "On Inorganic Chemistry."

11. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

12. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Professor Owen "On Fishes."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 7½ p.m., Ballot. 8½ p.m., Mr. T. Bryant's "Contributions to the Subject of Compound Fracture;" Mr. Nourse "On the Causes of Leprosy."

ROYAL COLLEGE OF SURGEONS OF ENGLAND. Professor Savory "On the Physiology of Food."

13. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m. Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

ROYAL COLLEGE OF PHYSICIANS, 4 p.m. Dr. Brown-Séquard "On the Diagnostic Value and Modes of Production of the Various Symptoms of Diseases of the Brain."

14. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Professor Tyndall "On Electricity."

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 3 p.m. Mr. Coulson's "Hunterian Oration."

KING'S COLLEGE MEDICAL SOCIETY, 8 p.m. Dr. Duffin "On the Pathological Modifications of the Voice."

15. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

ROYAL COLLEGE OF PHYSICIANS, 4 p.m. Dr. Brown-Séquard "On the Diagnostic Value and Modes of Production of the Various Symptoms of Diseases of the Brain."

ROYAL INSTITUTION, 8 p.m. Henry F. Chorley "On English Poetry in Reference to Music."

WESTERN MEDICAL AND SURGICAL SOCIETY, 8 p.m. Dr. Anstie "On the Action of Certain Narcotics."

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ORIGINAL LECTURES.

CLINICAL LECTURES
ON
THE DISEASES OF WOMEN.

By J. Y. SIMPSON, M.D. F.R.S.E.
Professor of Medicine and Midwifery in the University of Edinburgh.

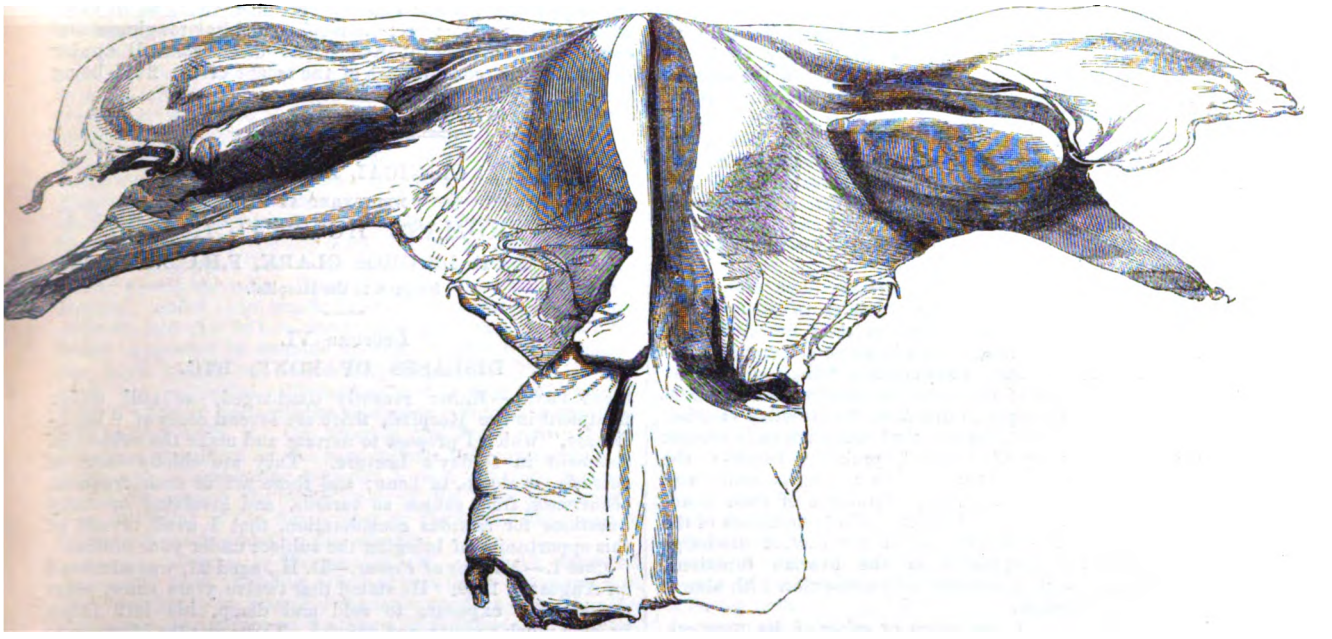
LECTURE XXXVI.—*continued.*

ON SUPER-INVOLUTION OF THE UTERUS AND AMENORRHŒA.

Again, however, you will far more frequently meet in practice with cases of amenorrhœa in young women, where there is no deformity of any kind in the sexual organs, but where the disease results only and merely

2. *From Retarded Menstruation.*—The period at which menstruation first supervenes is not, as you are aware, definitely limited to any one or two years. The great majority of women in this country begin to menstruate, as shown by Dr. Roberton and others, at from fourteen to sixteen years of age. But in many the discharge appears much earlier, in some even as early as the eleventh year; while in others it may be delayed till a much later period. Young women sometimes become anxious when they find themselves attaining to nineteen or twenty without becoming unwell like others of their own age; or their mothers may take alarm at the non-appearance of the menses, and bring them to you for advice. In such cases the delay may be the result of some form of constitutional disease; but frequently enough the girl is otherwise perfectly strong and well developed, and you may bid your patient wait in the confident assurance that betimes all will come right with her. Sometimes, indeed, patients have become impregnated without the catamenial discharge having ever appeared in them at all. Where the full development of the menstrual secretion is thus delayed, the patient may present no symptoms of any monthly molimen at all. But in other cases she has all the symptoms that are usually seen in connexion with the catamenial flow, and not unfrequently a kind of leucorrhœal discharge takes place at these regular monthly periods, which seems to indicate an attempt on the part of the uterus to furnish the true sanguineous secretion. In all these cases the amenorrhœa is not necessarily of a morbid character, and may be dependent simply on some physiological peculiarity in the patient's constitution. It does not then call for any active line of treatment any more than it does in the next class of cases to which I have to refer, and where the amenorrhœa results,

3. *From Premature Cessation of the Menses.*—The time when the menstrual discharge ceases to flow is even less definite than that at which it first appears. For while most women cease to menstruate from the fortieth to the fiftieth year of life, in some the flow continues later; and in others it may disappear before the age of forty, or even as early as thirty. In most cases in which the catamenial flow becomes arrested at an unusually early period of life, a morbid local or constitutional cause may be discovered. But there still remain a few cases in which this premature cessation of menstruation may be quite healthy and physiological, and altogether unconnected with any pathological condition.



Sketch of the internal organs of generation from the patient whose history is given at the commencement of the Lecture. The woodcut presents the uterus and upper part of the vagina, the broad ligaments and ovaries of the exact size which they presented; and their degree of atrophy may be easily judged of by comparing the sketch with the same parts when of the normal size. The sketch represents the posterior surface of the uterus and broad ligaments, with the uterine cavity exposed to show the diminished thickness of the walls of the viscus. The whole parts represented in the woodcut weighed only one ounce, four drachms, twenty-five grains, in Apothecaries' weight.

4. *From Constitutional Affections.*—In many morbid states of the constitution in which there is marked and general depression of the vital powers, the functions of the genital organs are apt to be impeded, and the menstrual discharge either fails to appear, or ceases after it has once existed. In strumous subjects, for example, in whom the process of development goes on but slowly, we find that the catamenial flow is frequently very late in becoming established; and Scanzoni is doubtless very near the mark when he states that in 19 out of 31 scrofulous girls the menses do not appear till the age of 21. We see, further, when pulmonary phthisis begins in such patients, that the menstrual function is often greatly decreased or completely in abeyance for many months, it may be even a year or two, before the disease proves fatal. You will find that in patients with incipient phthisis, there is not unfrequently a kind of menstrual hæmoptysis—the patient beginning to spit blood every month at the date corresponding to that at which the uterine menstrual discharge used to appear; the system attempting, as it were, to relieve itself by means of the lung of some portion of that excess of blood of which it was wont to get rid through the uterus. In such cases you may sometimes succeed in restoring the

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arrested function of that organ, and so in averting the threatened danger to the lungs and the life of your patient, by means which I shall have to describe to you in speaking of the treatment of the disease. Amenorrhœa is, moreover, one of the most constant symptoms seen in connexion with that morbid state of the constitution which we designate chlorosis. One of the essential elements of the chlorotic condition of the body, as you are aware, is a greater or less degree of anæmia; and in many cases the diminution in the quantity of the blood, or at least in its coloured corpuscles, becomes so great that it would appear as if the system had none to spare for the uterus to secrete at the usual monthly periods. In such patients the process of ovulation may, and in most cases probably does, go on quite regularly. Graafian vesicles burst at the normal menstrual periods, and discharge their ova through the Fallopian tubes and the uterus; and then there is generally a pale kind of leucorrhœal discharge, which continues for a few days, and is attended with the same kind of local and general disturbance that we see associated with the proper uterine discharge. Either, however, the function of ovulation is so impaired as not to stimulate the uterus sufficiently to throw out its usual secretion; or the supply of blood furnished to the organ is too scanty to allow of the separation of any adequate quantity of it from the circulation. In cases of scrofula, then, and of chlorosis and all forms of anæmia, and in many other cases of disease in which the vital powers are lowered, the menstrual discharge is liable to become retarded or diminished, or may be arrested to a degree amounting to absolute amenorrhœa. But in the great majority of cases amenorrhœa will be found to arise,

b, From Diseases of the Organs of Generation themselves.—It may result, first of all, from disease,

a, Of the Ovaries.—When both ovaries have undergone such a degree of dropsical degeneration as to render them altogether unfit any longer to perform their functions, you can readily understand that there will be no attempt at menstruation and no appearance of any menstrual discharge, in consequence of the want of the stimulus usually resulting from the separation of the ripened ova from the Graafian vesicles. But we often enough see, besides, that amenorrhœa is present when only one ovary is diseased, probably because the pressure produced by the tumour on the other ovary and the uterus interfere with the due performance of their function. In cases of atrophy and other morbid conditions of the ovary we find the same absence of the uterine discharge resulting from the suspension of the ovarian functions. Again, we meet with amenorrhœa in connexion with almost every variety of disease,

b, Of the Uterus,—at one stage or other of its progress. Thus, when either the uterus itself, or the cellular tissue in its neighbourhood becomes the seat of the inflammatory process, the function of the organ usually becomes for a time impeded, and the patient may pass one or more "periods" without showing any appearance of a catamenial discharge. In cases of fibroid tumour of the uterus, also, more particularly when they are of the sub-peritoneal variety, the patient is not unfrequently first made aware of the existence of her disease in consequence of the cessation or diminution, for a time, of the usual monthly discharge; and even in cases where the tumours are sub-mucous, and projecting into the cavity, there may be periods of amenorrhœa, alternating with those attacks of menorrhagia which are more characteristic of this variety of tumour, and which are so damaging to the patient's health. Not only in cases of fibroid tumour of the uterus may there be amenorrhœa; it is also sometimes seen in the early stages of cancerous and cancroid degeneration of the organ. In this form of disease, as you know, an excessive and frequently-repeated flow of blood from the womb is often the first warning the patient has of her malady, and this menorrhagia sometimes continues as one of the most constant and depressing symptoms throughout its course. But on making inquiry you will not unfrequently find that before these draining discharges set in the patient had for a time been the subject of amenorrhœa, and it may happen that a patient will apply to you on account of amenorrhœa, dependent on incipient carcinomatous disease of the uterus. In cases of sub-involution of the uterus, moreover, such as I described to you in my last Lecture, and other kinds of uterine hypertrophy; and, in short, in almost every kind of disorder to which the uterus is liable, its peculiar functions may, for a time, be suspended, and the patient may be the subject of amenorrhœa. But it is most frequently in connexion with some form of atrophy of the organ that we find amenorrhœa existing as a permanent and peculiar feature of the disease; and in a very large proportion of cases where patients have been suffering for a lengthened period from diminution or complete suppression of the menstrual flow, the uterus will be found on examination to be preternaturally small, whether as a result of that kind of super-involution which I have attempted to describe, or of some other wasting process. Finally, we may have amenorrhœa as a consequence of cicatricial occlusions,

c, Of the Vagina.—When labour becomes tedious, and the head of the child remains fixed for a lengthened period in the maternal passages, sloughing of some of the soft parts is apt to ensue, and as a result of the subsequent ulceration and contraction, the vaginal canal may become completely occluded. In such a case, after the period of lactation is ended, the menstrual fluid will be again secreted, provided the obstruction be not complete. But if it be complete, and the vagina has become entirely occluded, then, as in cases of amenorrhœa from preternatural congenital toughness and complete closure by the hymen, no discharge will appear externally, in consequence of the escape of the fluid being prevented by the vaginal obstruction.

CLINICAL LECTURES

DELIVERED AT

ST. THOMAS'S HOSPITAL IN 1861.

By F. LE GROS CLARK, F.R.C.S.

Surgeon to the Hospital.

LECTURE VI.

DISEASES OF BONE, ETC.

GENTLEMEN,—Either recently discharged, or still under treatment in the Hospital, there are several cases of "bone-disease," which I propose to narrate and make the subject of comment in to-day's Lecture. They are chiefly cases of necrosis, or death, of bone; and these are of such frequent occurrence, from causes so various, and involving so many questions for anxious consideration, that I avail myself of this opportunity of bringing the subject under your notice.

Case 1.—*Necrosis of Femur.*—D. H., aged 21, was admitted on August 6, 1860. He stated that twelve years since, after considerable exposure to cold and damp, his left thigh became much swollen and painful. Three months afterwards an abscess formed and burst on the outer side of the thigh, and this obliged him to walk with crutches. Subsequently, a second opening formed on the opposite side of the limb, and small pieces of bone were discharged from time to time. The limb became so far serviceable as to enable him to do in-door work; but an accident, two months since, induced fresh inflammation, and obliged him to quit his service and come to the Hospital. When admitted, an opening, on either side of the thigh, discharging freely, communicated with the bone in the popliteal space: the base of the femur was very much expanded. For the removal of the necrosed fragment which, it was assumed, occupied this position, a free incision was made on the outer side of the thigh between the bone and the biceps muscle. The popliteal space was thus reached in front of the vessels, and the finger could be introduced into an opening in the back of the femur, which was so expanded as to appear as if it bifurcated in this position. Much difficulty was experienced in introducing a pair of curved forceps so as to seize the sequestrum; but the attempt was ultimately successful, a small fragment only being left to separate spontaneously, as it could not be extracted. This patient left the Hospital when convalescent.

Case 2.—*Necrosis of Femur.*—J. D., aged 19, a sailor, was admitted on October 17, 1860. About two years ago he fell down the hold of a ship and struck his thigh. About two months afterwards he had an attack of rheumatic fever, the elbow and wrist-joints becoming swollen and painful, accompanied by pain in the injured thigh. Three months subsequently an abscess was opened on the lower part and front of the thigh: other openings have since formed spontaneously. On admission, the whole femur, from the trochanter to the

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condyles, was much enlarged, and several sinuses, at different parts, led to dead bone. His health was much broken; he was emaciated and had night sweats, but a tolerable appetite, and no cough. The treatment has been purely tonic, and the supply of good nutriment; and his general health is so far restored as to enable him shortly to undergo the necessarily severe operations which will be required for the removal of sequestra which extend through a considerable portion of the shaft of the bone.

Case 3.—*Necrosis of Tibia.*—J. M., aged 18, a sailor, admitted on January 8, 1861. He was hurt on the leg fourteen months since. Inflammation and an attack of fever followed; and after two months, thin plates of bone began to separate from the tibia. His health is now good. The bone is much thickened and expanded from its base about one-third up. There are several sinuous openings on the surface, communicating with dead bone.

Case 4.—*Necrosis of Humerus.*—J. A., aged 12, admitted September 21, 1860. The history of this boy is, that he was healthy until, after repeated exposure to wet, he was attacked, two months ago, with fever, the right knee and shoulder becoming, at the same time, much swelled and painful. His Medical attendant appears at first to have regarded this attack as rheumatic fever; but, the symptoms being of a low type he afterwards pronounced the fever to be typhus, and treated it accordingly. Ten days before admission the shoulder suppurated, and in a week ulceration took place, and allowed the bone to protrude. When admitted he was much emaciated; pulse feeble; eyes bright; tongue red and glassy. Just beneath the acromion, the upper extremity of the shaft of the humerus, separated at the epiphysis, protruded through an irregular opening in the skin, to the extent of about an inch. The granulations of the red and swollen edges adhered to the protruded bone. The knee-joint of the same side was swollen, tender, and much flexed. A generous diet was ordered, and the bowels were regulated; the arm and leg being supported in suitable splints. Under this treatment the boy's health has considerably improved. The necrosed shaft has protruded still further, and is now daily moved, with a view of hastening its separation; but the entire bone still moves with it. On rotating the lower part of the humerus, the head of the bone follows the movements also, indicating a continuity between it and the new material deposited around the lower part of this large sequestrum. The condition of the femur near to the knee-joint seems to indicate bone-mischief in this site also.

Case 5.—*Disease of Tarsus.*—G. W., aged 12, admitted August 28, 1860. This boy, who had been ill for two years, had been previously an inmate of the same ward, and was then the subject of an operation on the tarsus, in the hope that a sequestrum might be found and removed. A small piece of necrosed astragalus was taken away with temporary relief. On re-admission, the foot between the ankle-joint (which does not appear to be implicated) and the metatarsus was swollen, and presented sinuous openings on either side of the astragalus, through which a probe may be passed into cancellous structure. A T-shaped incision was made over the outer surface of the astragalus, but no sequestrum was found. He left the Hospital for a time, but has now returned in much the same condition. His health is good. There are now openings on either side and at the back of the ankle, into which a probe may be passed deeply, until arrested by diseased, probably carious, bone, of which most likely both the astragalus and calx are the seat.

The class of disease repersented by the foregoing cases is of common occurrence, and, therefore, the more worthy of your careful study. I need not to remind you that necrosis and caries of bone correspond to mortification and ulceration of the softer textures; and, that as the same organisation exists there is a similar proneness in both instances, to inflammation from various causes, and its several consequences.

I will classify the few remarks I have to make under the following heads:—1. The relative liability to ulceration and death, of different textures of bone. 2. The exciting causes of destructive inflammation in bone. 3. Partial or complete death of bone. 4. The influence of necrosis in the proximity of joints. 5. The treatment and reparative process.

In four out of the five cases which I have related, the seat of the disease is the shaft of a long bone; in the fifth it is the cancellous structure of the tarsal bones; and such we find to be the case, with comparatively rare exceptions; viz., that cancellous texture, whether in the epiphyses of the cylindrical bones, or in the irregular bones, is the seat of caries, while the fibrous, compact texture of the shafts themselves are visited with necrosis. This is, no doubt, due in part to the difference in texture and organisation of these different tissues, and, in part, to the comparatively sheltered position of the cancellous portion of a bone, whereby it is rendered less obnoxious to causes of destructive inflammation from without, such as mechanical injury or exposure to cold. Whatever may be the explanation, however, such is unquestionably the fact; and, moreover, caries more often occurs without the occurrence of any assignable local cause; but necrosis of bone may almost always be traced to the agency of some exciting cause, in the absence of any apparent constitutional predisposition, as illustrated in the above cases; and what are these exciting causes? A very frequent one is mechanical injury; but where this is so, I believe it will be generally found, on careful examination of the history of the attack, that other causes have been simultaneously in operation to determine this result; such as exposure, hard labour, insufficient or unwholesome food, and the like. Exposure to cold and damp is frequently the only exciting cause which we trace as productive of acute inflammation of periosteum and bone. In the first case I have narrated such was the history. In the second and third cases, an injury was received in the first instance, followed, in the former, after an interval of two months, by the symptoms which ushered in the local disease, and in the latter, after a shorter interval In the fourth case, the lad had repeatedly got wet through and dried his clothes on him; so that cold was here also the exciting cause. I wish you to notice the particulars of the attack in each of these cases, as carefully noted by my dresser, Mr. Hunter, as I desire to point out what I believe to be a not infrequent source of fallacy in the diagnosis of acute ostitis. Simple fever, as well as rheumatic and typhus fever. are associated with the local disease, and are made to appear, as they are often supposed to be, the *cause* of the bone-disease, instead of being regarded, as I believe they usually are, as constitutional effects of the local disorder. Observe how, in the fourth case, the local disease seems to have been, in great measure, ignored; or, regarded as secondary to the fever, which was at first supposed to be rheumatic, but was afterwards regarded as typhus. This is a point of considerable practical importance: for local inflammation of bone may run its course to irremediable destruction of the bone attacked, in the course of a few days, and the patient may perish in a way I shall presently notice, before the active source of the constitutional mischief attracts serious attention. I do not mean to deny that ostitis and necrosis of bone may be a sequence of some forms of fever; but then it is not, as far as I have observed, a concomitant of the early stage of such disease, but rather a later consequence of blood-poisoning.

Some very interesting cases, illustrative of this and another point of great interest, have occurred from time to time in the Hospital. One or two of these I witnessed, and my colleague, Dr. Bristowe, has kindly placed at my disposal the notes of others. They are the cases of patients who have applied for admission into the Physicians' wards, and who rapidly succumbed to what appeared to be an acute attack of fever, attended by pain and swelling in some part of a limb, or near to a joint. The autopsy displayed acute ostitis, followed by suppuration, and pyæmia as the cause of death; and this, perhaps, after the lapse of a few days from the first appearance of symptoms.

This is an interesting fact, and I believe that this transfer of pus is a not infrequent occurrence in cases of acute ostitis or periostitis, running rapidly into suppuration. The explanation of this circumstance is not very clear; probably, it is due in a measure to mechanical facilities afforded by the veins distributed in bone; for it is found that, not only is the periosteum ripped up, and the cancellous texture loaded with the products of acute inflammation; but pus is also found pervading the Haversian canals of the compact tissue. The veins are probably involved in the inflammatory action; but ulcerated openings in their walls would facilitate absorption, where the density of the surrounding texture does not permit of the ready diffusion of the rapidly secreted pus, and other inflammatory products.

In these cases of acute inflammation, terminating speedily in suppuration, we find pus deposited between the periosteum

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and bone, separating them from each other, and entailing loss of vitality, perhaps of the surface of the bone only; or, if the inflammation have extended deeper, there will be necrosis of the entire substance of the shaft, and pus will then also be found within the canal of the bone. It rarely occurs, however, under these circumstances, that the epiphysis perishes with the shaft; that is, when the shaft of a cylindrical bone is first attacked. Necrosis may extend upwards as far as the epiphysis and there stop, as illustrated in the fourth case, where the humerus is the seat of the disease. Occasionally, but rarely, the whole shaft of a long bone may thus perish, to the exclusion of the epiphysis,—of this I have had two instances under my care; one in which the femur was attacked, and the other where the humerus was affected. In both of these cases the patients made a good recovery after operation. I say the death of the entire shaft of a large cylindrical bone is comparatively rare. Appearances are often deceptive in this respect. In Case 2, that of the sailor on whom I am about to operate, the enlarged state of the bone from the trochanter to the condyles, and the many sinuous openings in its course, would suggest the belief that the shaft of the bone has entirely perished; yet I do not believe such to be the fact; but that there is necrosis at various points, which will require separate operations for the removal of the sequestra. It is remarkable how small a sequestrum will sometimes establish and keep up a large amount of irritation and vascular action; and this, too, continued through many years, when no Surgical assistance is afforded to aid the abortive attempts of Nature to get quit of the noxious body. My first case illustrates this point.

When necrosis occurs, as it sometimes does in the cancellous epiphysis of a long bone, such as the femur or tibia, the presence of the sequestrum may entail diseased action, which extends, by contiguity, to the interior of the joint; and having noticed this occurrence in not a few instances of diseased knee-joint, where excision has been resorted to, I suspect that the disorganisation of the joint may be attributed, in many cases, to extra-articular necrosis as the exciting cause. It is true that the latter may be the sequence of the former, but from the nature of the two forms of disease, and their usual course and termination, I am rather disposed, in such instances, to regard the sequestrum and antecedent ostitis, as more probably the cause than the effect. The question is, however, at this stage, of not much practical import; for the disorganisation of the joint being ascertained, the removal of the sequestrum would not supersede the necessity for excision.

In the treatment of necrosis, we should carefully consider the natural process of reparation, and what can be accomplished, and what cannot, without Surgical interference. In superficial necrosis, the consequence of inflammation stopping short of suppuration, a plastic exudation takes place beneath the periosteum, which becomes bony after a time; and when the inflammation extends through the bone, a similar deposit is formed in the cancellous structure of the interior of the cylinder, in fact, blocking up its medullary canal. The limb of a lad which I have just amputated for extensive disease of the knee and leg below the joint, is a good illustration of this state. A large portion of the shaft of the tibia is necrosed, and reparation is extending in the way described. The borders of the dead bone are overlapped by new ossific deposit; and on raising a portion of the large sequestrum, recently deposited bone is also seen in abundance, occupying the medullary canal; in fact, filling it, so that the sequestrum lies between new bone within and without.

This healthy reparative action is quite consistent with copious suppuration from the cloacæ or apertures through the new bone. Such secretion of pus is to be distinguished from the earlier suppuration which marks the destructive stage of inflammation. The discharge of pus at the later period is kept up by the presence of the sequestrum (which acts as any other foreign body would do under similar circumstances), and materially aids in its removal: for the natural expulsion of a dead fragment of bone is effected by its gradual solution in the pus, and not by a process of absorption. The animal element is naturally dissolved most readily, and the earthy matter is discharged either in actual solution, or, as is more probable, in minute subdivision, for its particles may be detected by the microscope in pus which escapes from a cloaca thus circumstanced. My colleague, Dr. Bernays, has been kindly aiding me by analysing pus thus procured; but the results of his examination are not sufficiently satisfactory as yet for me to lay them before you. At the same time it must be remembered that the irritation and suppuration may be excessive, and thus prove fatal by exhausting the patient; therefore, it behoves the Surgeon so to time his operation as to avert this catastrophe. If possible, before operating, he should ascertain whether the sequestrum is loose. I say, if possible; for this is not always determinable. In Case 2, for example, I have no doubt that there are loose sequestra, though from the depth at which they lie, and from the small size of the apertures through which they can be felt, I cannot move them; and I have been waiting only till I can build up the man's shattered frame a little by nutritious diet, before I operate; but his hectic cheek tells me I must delay no longer. Having determined on operating, it is well to pass a strong probe or director into the cloaca and have it held there, while you make a free external incision, of course selecting a spot where vessels and other important parts will be secured from risk of injury, and thus display the portion of bone on which you are about to act. Guided by the director, you then cut away, with a strong gouge or chisel and mallet, the surrounding portion of new bone, until you have space enough to seize and remove the offending fragment. Perhaps a trephine may, in some cases, be more convenient. If the sequestrum be too large to remove entire, it may be advantageously broken first, and extracted in pieces. In the boy with necrosis of the humerus I have frequently tested the firmness of the dead bone in its socket of new bone; and I shall soon, I hope, be able to draw it out. But I am anxious not to risk breaking it and thus leaving any fragment behind, which probably would entail protracted irritation and a more painful and serious operation for its removal.

I have not yet decided on what course to pursue in the case of diseased tarsus; but probably I shall make an exploration of the seat of disease, in such a way as to enable me to complete an amputation at the ankle-joint if necessary.

As regards operations for the removal of carious bone, I cannot say that my experience justifies my recommending the proceeding of gouging out the diseased texture. My belief is, that violence thus offered to the parts often involves the surrounding healthy bone in diseased action, and thus leaves the patient in a worse state than before. The condition is analogous to that of an excavated ulcer in soft parts, and seems to me to be more amenable to treatment adapted to such state. Sinuses may be freely laid open, and suitable dressing employed, to encourage a healthy action and spontaneous cure. But I am aware the weight of opinion, as regards the general practice, is adverse to this negative treatment.

The poisonous action of mercury is unquestionably a cause of necrosis of bone in some instances, especially the bones of the skull. This sequel is happily rare in the present day, but you will remember an instance of much interest under my care recently, where such was the case. The patient I refer to had extensive necrosis of the entire thickness of a considerable portion of the frontal bone; and symptoms of head mischief supervening, it was necessary to trephine the dead bone to evacuate pus which had accumulated between it and the dura mater. I had much trouble afterwards in controlling hernia of the brain, which followed sloughing of the dura mater. When the patient left the Hospital the aperture had closed, but a considerable fragment of dead bone still remained attached. This case illustrates another well-known fact of interest, viz. that such apertures resulting from breach of substance in the skull are rarely closed (unless very small) by regeneration of bone. The edges of the opening are, in this case, bevelled off, squamous, and the breach itself is occupied by fibroid tissue.

[Since this Lecture was delivered, Cases 2 and 4 have been the subject of operation. In the former a free incision was made on the outer side of the thigh, below the trochanter, and the new bone was chiselled away around the cloaca, until a sufficiently large aperture was obtained for the removal of a sequestrum. This was broken and taken away in fragments. In Case 4 the integument surrounding the protruding shaft of the humerus was detached from its connexions, and, by patient and careful loosening of the dead bone, it was withdrawn entire. Considerable force was requisite. It was found to include fully one-half of the shaft of the humerus. Cor-

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tinuity, however, of the sound lower half with the head is established. The arm is, of course, materially curtailed of its length, but the head of the bone follows the movements of the shaft; and the lad has the prospect of an useful limb.]

Several cases of interest have been admitted during the past week, but the time will only permit of my glancing briefly at them.

I have operated on another case of fissure in the rectum, in a young female, and with the same result as in the case related in a former Lecture. In the present instance, the fissure had spread just above the sphincter, into a deep, excavated ulcer, admitting the point of a finger; but the same operation is applicable as where there is simple fissure. A wound of the radial artery at the wrist, by glass, was followed by active hæmorrhage, and was treated by ligature of both ends of the divided vessel. A poor woman has been admitted with extensive malignant disease, I believe medullary cancer, of one-half of the pelvic bones, both in front and behind; of course nothing can be done for her.

Several cases of fracture I shall reserve for comment at my next Lecture; some of these present points of peculiar practical interest.

One case, in which I performed tracheotomy, demands more than a passing notice. The patient, a boot-closer, aged 26, had been the subject of phagedenic ulceration of the palate and pharynx, probably syphilitic, two years since. The consequence of this is contraction of the outlets at the back of the mouth, rendering deglutition and expectoration difficult. The painful and distressing dyspnœa, whenever the bronchial secretion was thick and abundant, seemed to threaten suffocation, and induced the patient to entreat urgently that some relief might be afforded to him; and with the sanction and in the presence of my colleague, Dr. Brinton, I opened his trachea and introduced a tube. The result has been most satisfactory. The patient's improvement in appearance is very marked; he has gained flesh, and looks cheerful; he sleeps quietly; deglutition is facilitated; and he expresses himself as well satisfied with the relief he has obtained. A double trachea-tube enables him to cleanse the instrument for himself at pleasure.

ORIGINAL COMMUNICATIONS.

STATISTICS OF COMPOUND FRACTURES AT ST. GEORGE'S HOSPITAL.

By G. F. COOPER, Esq.

Late Surgical Registrar.

The following statistics comprise all the compound fractures that have been admitted into St. George's Hospital during a period of seven years, that is, from 1852 to 1859 inclusive; no cases having been recorded during the latter half of 1857 and the first half of 1858:—

The total number of cases was 124; of which 35 died, or 28·2 per cent. Of these, primary amputation was had recourse to in 23 cases, of which 9 died, or 39 per cent.; and secondary amputation in 5, of which 1 died.

Of the 23 primary amputations, 7 were of the thigh, of which 4 died, or 57 per cent.; 8 of the leg, of which 5 died, or 62 per cent.; 4 of the arm, and 4 of the forearm, of which all recovered.

Of the 5 secondary amputations, 4 were of the leg, of which 1 died; and one of the forearm, which recovered.

Sex.—Of the 124 cases, 105 were males, of which 33 died, or 31·4 per cent.; and 19 females, of which 3 died, or 15·8 per cent. Of the 3 deaths amongst the females 2 were from exhaustion, one being 50 and the other 70 years of age, both temperate in their habits of living; whilst the other one died of obscure symptoms of pyæmia—she being a woman of very dissipated habits.

This enormous difference both as regards the number of accidents and the per-centage of mortality between the two sexes, is easily accounted for, when we consider that the various employments in which men are engaged render them liable to accidents, greater in number and more severe in character, than those which befall the opposite sex; whilst the different mode of life, and the admitted fact that women bear confinement better than men, have also considerable bearing on the rate of mortality.

Age, there is no doubt, is one of the most important points to be considered in the treatment, and in the influence it bears on the mortality, of compound fractures. It may be conveniently divided into infancy, from birth to 5 years of age; childhood, from 5 to 15; adult age, from 15 to 50; and lastly, into decades from 50 to 60, etc.

In infancy, there were 2 cases, both recovered.

In childhood, there were 17, of which 2 died, or 11·7 per cent.

In adults, there were 72, of which 19 died, or 26·4 per cent.

Between 50 and 60, there were 19, 9 of which died; between 60 and 70, 12, of which 4 died; between 70 and 80, 1, which died; and between 80 and 90, 1, which recovered; making a total, from 50 years of age upwards, of 33 cases, of which 14 died, or 42·5 per cent.

This shows the gradual increase of mortality with advance of life.

Limb.—A Table is appended (Table A), in which Compound Fractures are divided into those of the thigh, leg, arm, and forearm; with the state of fracture to which each of these is most liable, as well as the result and duration of the disease. All Compound Fractures communicating with joints are removed from this Table, but will be found by themselves in another (Table B).

The total number of Compound Fractures of the Thigh was 16, of which 8 died, or 50 per cent.

Of the Leg, 82, of which 23 died, or 28 per cent.

Of the Arm, 11, of which 3 died, or 25·5 per cent.

Of the Forearm, 16, of which 1 died, or 6·6 per cent.

Nature of the Accident.—The most simple way of classifying accidents, is into direct and indirect injuries—the blow being applied directly to the part injured in the former, and indirectly in the latter. But as there are many accidents, such, for instance, as when a person falls from a great height, where this distinction cannot for a certainty be made out, it has been deemed advisable to add to these a third class of injuries, which, for convenience, we will term 'doubtful,' and which will probably include cases of both direct and indirect injuries.

Of direct injuries there are 64 cases, of which 19 died, or 29·7 per cent. Of indirect injuries there are 21 cases, of which 3 died, or 14·3 per cent. Of doubtful injuries there are 39 cases, of which 13 died, or 33·3 per cent. The great mortality of the last class is explained by the majority of the cases being very severe.

In illustration of this it may be advisable to give very briefly the notes of three cases, taken at random from the case-book, as examples of each kind of injury:—

S. S., aged 44, a drayman, was admitted into St. George's Hospital on July 7, 1859, with a compound fracture of his ulna. It was caused by a direct blow: the man having been knocked down by the horse of the dray he was driving; the horse having then stepped upon his forearm. The ulna was fractured transversely at the seat of injury, where also was a small wound leading down to the bone. The man had a slight attack of delirium tremens, but from this he soon recovered, and left the Hospital on the 20th.

Mary S., aged 70, was admitted into St. George's Hospital on July 14, 1859, for a compound fracture of the thigh into the knee-joint. Her history was, that two days previous to her admission, she slipped down while walking, and on attempting to get up found she was unable to do so. She was directly taken to a Surgeon, who "set it." On her admission there was an oblique fracture of the femur, immediately above the condyles, and a small wound not half-an-inch in length on the outer side, through which the bone had evidently protruded. The thigh was put up in a Desault's long splint, and stimulants were ordered. Irritative fever came on, and sloughing bed-sores formed over the sacrum, which resulted in her death, three weeks from the period of the accident.

Robert F., aged 18, was admitted into St. George's Hospital on March 20, 1858, for a compound fracture of the left femur. This is an example of a "doubtful" injury, as the man fell from a house whilst cleaning some windows, a distance of sixty feet. On admission there was a fracture of the lower third of the femur, the upper fragment of the bone projecting through a wound about the size of a silver threepenny piece. He sustained other injuries at the same time, as a

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scalp-wound and some contusions about his arm, etc., but as the details of the case are of no importance here, it will be sufficient to say that in two months' time he left the Hospital cured.

From the Nature of the Accident we must directly pass on to the

State of the Wound in compound fractures, as the one is so frequently the cause of the other. Wounds may be divided into Lacerated, Contused, and Punctured. For statistics of these nothing better can be done than to refer to the data on the nature of the accident; for punctured wounds almost invariably follow an indirect injury, whereas contused and lacerated wounds follow direct injuries. But in order to get a correct statement of the lacerated and contused wounds, an average should be taken of the direct and doubtful injuries, as the latter, being almost always severe, probably cause contused wounds.

In Table A, the *State of the Fracture* has been divided into transverse, oblique, comminuted, and into a fourth class, headed "not stated," in which are placed those cases where an accurate statement of the fracture was not recorded.

Transverse Fractures—Of the Thigh, there were 2 cases, both of which recovered: the average number of days in the Hospital was 100.

Of the Leg, 23 cases, 2 of which died, the average time in the Hospital of those cases being 80 days.

Of the Arm, 3 cases, all of which recovered, the average time in Hospital being 43 days.

Of the Fore-Arm, 3 cases, all of which recovered, the average time in Hospital being 25 days.

Oblique Fractures—Of the Thigh, 6 cases, 3 of which died, the average time in Hospital of those cured being 92 days.

Of the Leg, 22 cases, of which 6 died, the average time in Hospital of those cured being 104 days.

Of the Arm, 1 case, which recovered, and was in the Hospital 41 days.

Of the Fore-Arm, 1 case, which died.

Comminuted Fractures—Of the Thigh, 3 cases, 2 of which died, the case that recovered was in the Hospital 62 days.

Of the Leg, 23 cases, of which 9 died, the average time in Hospital of those cured being 110 days.

Of the Arm, 1 case, which recovered, and was 96 days in the Hospital.

Of the Fore-Arm, 6 cases, all of which recovered, the average time in Hospital being 56 days.

Fractures not stated—Of the Leg, 5 cases, 3 of which died, the average time in Hospital of those cured being 91 days.

Of the Arm, 1 case, which died.

Of the Fore-Arm, 2 cases, both recovered, the average time in Hospital being 15 days.

In Table A all the cases of compound fracture have been enumerated (124 *in toto*) with the exception of 24, in each of which latter the compound fracture communicated with a joint; and as such injuries are much more severe than ordinary compound fractures, it has been thought advisable to put them by themselves in another table (Table B).

In this table will be found 7 cases of compound fracture into the knee-joint, of which 3 recovered, the average time in Hospital being 80 days, and 4 died, the average time in Hospital being 8 days. Primary amputation was performed in all but one, and that was a doubtful case of wound of the joint, which recovered. Of the ankle-joint there was 9 cases, of which 6 recovered, the average time in Hospital being 91 days; and 3 died, the average time in Hospital being 21 days. In one of the cases that recovered, and two of those that died, primary amputation was had recourse to. Of the elbow-joint there were 8 cases, 5 of which recovered, the average time in Hospital being 89 days, and 3 died, the average time in Hospital being 9 days. In one of the cases that recovered, and one that died, primary amputation was had recourse to.

Treatment.—As regards local treatment little need be said,

TABLE A.

THE STATE OF FRACTURE, TOGETHER WITH THE RESULT AND DURATION OF THE DISEASE.

Year.	Transverse. (a)				Oblique. (a)			Comminuted.			Not Stated.		
	Limb.	Number of Cases cured.	Average time in Hospital of those cured.	Deaths.	Number of Cases.	Average time in Hospital of those cured.	Deaths.	Number of Cases.	Average time in Hospital of those cured.	Deaths.	Number of Cases.	Average time in Hospital of those cured.	Deaths.
			Days.			Days.			Days.			Days.	
1852	Thigh	..	..	..	..	..	..	..	..	..	..	..	..
	Leg	7	66	..	2	45	..	2	134	..	..	..	2 { 2 hours 6 days
	Arm	2	54½	..	..	..	..	1	96	.	..	..	..
	Forearm	.	..	..	..	..	..	1	83	..	1	21	..
1853	Thigh	..	..	..	1	72	..	..	..	1 37 days	..	..	..
	Leg		59	1 12 days	2	136	..	5	88	3 { 22 days 19 days 29 days }	..	..	..
	Arm	..	..	..	..	..	..	..	..	..	..	..	..
	Forearm	1	10	..	..	..	..	1	58	..	..	..	..
1854	Thigh	..	..	..	..	..	..	..	..	..	..	..	..
	Leg	2	102½	..	1	90	2 { 23 days 14 days }	..	..	2 { 6 days 18 days }	..	..	..
	Arm	..	..	..	..	..	..	..	..	..	..	..	1 4 hours
	Forearm	..	..	..	..	..	..	..	..	..	..	..	..
1855	Thigh	..	..	..	..	..	..	1	62	..	..	..	..
	Leg	2	112½	..	1	245	1 36 days	1	213	1 36 days	..	..	..
	Arm	1	32	..	1	41	..	..	..	..	..	..	..
	Forearm	..	..	..	..	..	..	..	..	..	..	..	..
1856	Thigh	1	58	..	..	..	1 23 days	..	..	..	..	..	..
	Leg	1	80	1 13 days	4	64	..	..	..	1 16 days	1	115	1 16 days
	Arm	..	..	..	..	..	..	..	..	..	..	..	..
	Forearm	1	44	..	..	..	..	..	..	..	..	..	..
1857 and 1858	Thigh	..	..	..	2	111½	1 21 days	..	..	..	..	..	..
	Leg	3	85	..	5	73	3 { 53 days 6 days 20 days }	1	43	1 24 days	1	67	..
	Arm	..	..	..	..	..	..	..	..	..	..	..	..
	Forearm	1	21	..	..	..	1 9 days	1	54	..	..	..	..
1859	Thigh	1	143	..	..	..	1 7 days	..	..	1 24 hours	..	..	..
	Leg	3	59	..	2	73½	..	5	73	1 7 hours	..	..	..
	Arm	..	..	..	..	..	..	..	..	.	..	..	..
	Forearm	..	..	..	..	..	..	3	29	..	1	9	..

(a) As to the columns "Transverse" and "Oblique," it may be added that the latter is meant to refer to those fractures in which the obliquity is a striking feature; and the former to those in which the contrary is the case, since nearly all fractures are more or less oblique.

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except that all compound fractures of the thigh are treated in much the same mode as simple fractures, with Desault's long splint, double inclined planes, etc. as the case might require. Assalini's Box is almost invariably used at this Hospital for compound fractures of the leg, whilst Mackintyre's splint seems to be the favourite form of appliance at the other London Hospitals.

In all cases of compound fracture in which the wound is small, an attempt is made to convert the compound into a simple fracture by means of the application of a pledget of lint to the wound; but great care is taken that all active hæmorrhage shall have ceased before the lint is applied.

Causes of Death.—Of the 35 deaths, 9 followed primary amputation and 1 secondary amputation, and as these will be noticed amongst the statistics of amputations, no reference will be made to them here.

Of the remaining 25 cases, the causes of death are as follows:—Pyæmia, 10; Hospital gangrene and pyæmia, 1; irritative fever with obscure symptoms of pyæmia, 1; typhoid fever and debility, 1; exhaustion, 5; visceral disease, 2; other injuries, 5. Of five of these cases no post-mortem examination of the bodies was made. The causes of death assigned to them during life were,—pyæmia in 1 case, exhaustion in 1, typhoid fever and debility in 1, and other injuries in 2. Of the thigh there were 4 cases, 2 of which died of pyæmia, 1 of exhaustion, and 1 of other injuries. Of the leg there were 18 cases, 8 of which died of pyæmia, 1 of Hospital gangrene and pyæmia, 1 of obscure symptoms of pyæmia, with violent irritative fever, 3 of visceral disease, 1 of typhoid fever and debility, 2 of exhaustion, and 2 of other injuries. Of the arm, there were 2 cases, both of which died of other injuries. Of the forearm, there was 1 case, where both forearms were amputated by machinery: this man died of exhaustion.

TABLE B.

COMPOUND FRACTURES COMMUNICATING WITH JOINTS.

Year.	Joint.	Cured, and Number of Days.	Deaths, with the Causes. Number of Days.	Remarks.
		Days.		
1852	Elbow	90		
	Ankle	98	....	Primary amputation.
	Ankle	190	....	
	Knee	48	....	Primary amputation.
	Ankle	53	....	Dislocation of tibia inwards.
1853	Ankle	80	....	Compound dislocation.
	Knee	104	....	Primary amputation.
	Ankle	54	....	
1854	Ankle	68	....	Dislocation of tibia.
	Ankle	..	8 days; irritative fever	
	Knee (?)	87	....	
1855	Ankle	..	29 days; pyæmia	Primary amputation.
	Elbow	103	....	
	Elbow	164	....	
	Ankle	..	27 days; pyæmia	Primary amputation.
	Elbow	..	29 days; pyæmia	Primary amputation.
1856	Elbow	27	....	Primary amputation.
	Knee	..	23 days; pyæmia	Primary amputation.
	Knee	..	2 days; laceration of bladder and other injuries	Primary amputation.
1857 and 1858	Knee	..	30 hours; exhaustion	Primary amputation.
	Elbow	60	....	....
1859	Elbow	..	24 hours; exhaustion and other injuries	....
	Knee	..	7 days; pyæmia	Primary amputation.
	Elbow	..	1 hour; exhaustion and other injuries	....

APHORISMS AND OBSERVATIONS UPON CERTAIN DISEASES OF THE ORGANS OF SIGHT.

By W. R. WILDE, M.D., F.R.C.S.

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(Continued from Vol. XXXVII. p. 213.)

I am induced to resume these commonplace, but practical, and, I trust, useful, aphorisms and observations on the knowledge and treatment of diseases of the eye, from the circumstance, that Ophthalmic Medicine and Surgery in the present day would appear to consist in an endeavour to cure or relieve every affection by mechanical, or so-called surgical interference.

Eyedrops.—Having in my former papers upon the Pharmacopœia of the Ophthalmic Practitioner considered the subject of depletion, counter-irritation, fomentations, lotions, douches, and poultices, I now come to the subject of *Eyedrops*, than which there is none that affords a wider field for inquiry. Perhaps there is not in the whole range of Medicine a more inviting subject for the literary antiquary than that of eyedrops and collyria; for, since the days when Tobit met with the misfortune for the cure of which the gall of a fish was applied to his cornea, down to the present time, such substances have been the chief stock in trade of the travelling oculist, the quack doctor and nostrum-monger, the herbalist, the lady-bountiful, and the knowledgable old woman. All antique Medical literature of every country abounds with formulary for such medicaments, many of which derive their names from their inventors. Among the few that have come down to the present day is the collyrium, made of the substance called *lapis divinus*, a composition of copper, nitrate of potash, and alum, invented by St. Yves, for which a formula is given in most works upon diseases of the eye, and which is still highly thought of by some German authorities. The name must have been considered advantageous, otherwise Mr. Turnbull, in one of his works published in London a few years ago, would not have extolled it so highly. Among the class of mineral astringents of which zinc, alum, borax, corrosive sublimate, and the various preparations of copper and lead form the basis, I think the collyrium, composed of a weak solution of the "divine stone," is just as good as any other. Before it became known in this country, however, we were in the habit of using for the same purpose the aqua sapharina,—alluded to in my former communication,—but it has long since fallen into disuse. The compound alum liquor of the London Pharmacopœia, largely diluted, is perhaps as good a preparation of this nature as can be employed. The injurious results which sometimes follow the use of the preparations of lead in cases of ulcer cornea have very properly caused the discontinuance of their use. I have, however, seen white deposits on the cornea more frequently follow the application of lead in the form of a lotion than when dropped into the eye. A weak solution of corrosive sublimate has been much extolled; nevertheless, it does not hold its ground among many who have extensive opportunities of testing its value. The combination of lead and opium was in very general use for strumous ophthalmia some years ago, but it also has ceased to be the fashion; and as every one extensively engaged in practice knows, medicines, like dress or anything else, liable to the influence of public caprice, have their days of fashion. Preparations of both iron and iodine have been prescribed, especially for the removal of nebulæ or opacities of the cornea, and that within the last few years, but like other ephemeral clap-traps, they served only the purposes of their upholders or vendors. Preparations of gold have also had their advocates, but no mineral preparation has ever stood its ground so long, or been employed so extensively, nor, in my mind, with such good effect, as the nitrate of silver,—which, besides its general astringent properties, would appear to exercise a specific effect on mucous membranes, especially that of the eye. I cannot say, however, that its usefulness has been in proportion to its use, for, in consequence of its very general employment and applicability to most of the inflammations of the external textures of the eye, it is too frequently employed in those of the internal also, and many a case of iritis and choroido-iritis, specific and non-specific, has been aggravated by the use of lunar caustic, which might have got well if belladonna alone had been employed. In such cases, however, the fault is not in the remedy, but in the diagnosis. Another misuse of the solution of nitrate of silver has been its excessive strength, particularly about the time when the late Mr. Guthrie and his followers were in the habit of employing twenty grains to the ounce, and up to the period of the appearance of Mr. Tyrrell's practical work. For my own part, I have gradually lessened the strength of the solution, and my prescriptions now range from about one grain in five drachms to five grains to the ounce of fluid, and the former much more frequently than the latter. Among

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the misapplications of nitrate of silver in solution, I may mention that of pustular ophthalmia and ulcer cornea, unattended with general conjunctivitis, and in which cases it has been the practice to drop it—if possible—upon the pustule or ulcer, but which it as frequently missed, and, diffusing itself over the whole eye, produced general and necessary irritation of the conjunctiva. In such cases, the pustule, or ulcer, should be touched with a fine camel's-hair pencil, wet with the solution.

With respect to the means of using either nitrate of silver or any other drop, a few simple directions may not be out of place. Who is there that has not seen an adult patient stretched on a sofa, or an infantile one held there, with the eye forced open, while the impending drop was held in terror over him for a minute or more; and when it did come down it as frequently missed its aim as not. A quill cut somewhat like a pen, but with a rounded end and wiped free of its natural grease is the best means for applying a drop. This is not only much cleaner than the brush, but gives less pain in the application. Fixing the patient's head with the left hand as already described, and raising the upper lid slightly with the thumb—the little finger of the right hand should be placed upon the cheek, the quill held between the thumb and two forefingers and the lower lid depressed with the point of the ring-finger. In this position, with the patient's head leaning against a high-backed chair, and the Surgeon sitting on a high stool or standing somewhat to the right of the patient, with the light coming down obliquely from an opposite window—as at St. Mark's Hospital—any application either fluid or solid can be made most effectively. Then by desiring the patient to look up, down, in, or out, as the individual case requires, the drop can be thrown upon any part of the globe or lid by simply depressing the point of the quill. If, as is so frequently the case in chronic ophthalmia, the sulcus of the lower lid is the part on which we wish our solution to act, it is already depressed by the ring finger, and if the patient turns the globe upwards, which is the ordinary attitude assumed, the fluid can be thrown into the sulcus with great ease; not a drop merely, but the quill-full, which only washes over the surface of the membrane, and then forming an immediate chemical alteration by admixture with the tears and mucus of the eye, is ejected. Should the upper lid be the part on which we specially wish to apply the fluid, it can be everted in the usual manner, or, in case of difficulty, by using the end of the quill as a fulcrum. But if we are already acquainted with the state of the lid, it is only necessary to lift its centre slightly upwards and forward by the action of the thumb, drawing the integuments against the brow,—as I described many years ago,—and then touching gently the edge of the lid with the layer of fluid contained in the scoop of the quill, it at once flows over the conjunctival surface of the lid; but where it is necessary to apply the fluid to both conjunctivæ, a dexterous operator can manage to evert both lids and bring their edges to meet over the cornea. Glass tubes, quills with holes in the sides, and other devices, have been employed for this purpose, but in my opinion never answer so well as the foregoing. By this means young children or timid persons may be surprised into the application of the drop. In the ophthalmia of new-born infants, when the purulent matter has been gently washed away, I have long found the following mode of using the drop very efficacious:—Pour a small quantity of the caustic solution into the angle formed between the nose and the inner canthus, and then rapidly separate the lids, when the fluid runs in between them. This can be done to both eyes within half-a-minute.

¶ With respect to the use of caustic, or of painful applications to the eyes of young children, it requires a good deal of judgment to say where it should be enforced, and where not. Latterly, I seldom enforce it; as, independent of the irritation, both mental and bodily, caused by the struggle, and the want of confidence generated in the child towards the practitioner, it really is of more importance to get the child to allow quiescently an inspection of the eye than any good which the caustic effects in such case. As to give the mother or friends of the child in attendance at a public institution eye-drops of a painful nature to be used at home, I have long looked on it as worse than useless. In prescribing eye-drops in private practice, their mode of application should be explained. Patients have, I find, very generally a belief that they can insert the caustic themselves better than anyone else. My experience is contrary to this. The only part of one's own eye into which a person can with facility and effectually insert a drop is the inner canthus or the sulcus of the lower lid.

Respecting the olive-coloured staining produced by nitrate of silver, so well known to Practitioners, we require more exact information than has yet been published. In answer to the question why one person may use the remedy for many months with impunity, and another get the eye stained by its application for a few weeks, I can only say a well-collected set of cases is required. I apprehend that the cause of its acting in one person more than in another, resides in some peculiarity of the eye in which the conjunctiva happens at the time, or in the particular person to possess a mordant power which fixes the staining properties of the caustic at one time more than at another. My experience of this affection is, that it is more frequently produced by the long-continued use of a weak solution, than the application of the strongest caustic for a limited period. Cyanide of potassium, and other remedies have been proposed for the removal of the stain, but after giving them a fair trial, I cannot say I ever saw a successful case. Like atropine the solution of nitrate of silver poured upon the conjunctiva is, in some cases, perceptible to the patient's taste.

Vegetable astringents and sedatives have had a long-established reputation, and of these opium is the chief. Ware was one of the principal advocates for the wine of opium, so generally employed in Great Britain for the last sixty years. In certain cases of chronic ophthlalmia, it is, no doubt, a useful remedy, but its virtues were over-extolled, and like the solutions of caustic, it was constantly misapplied. I believe, however, it did less mischief in the subacute or chronic forms of ophthalmia, than the nitrate of silver did in the acute. While, however, lunar caustic is most applicable in the acute stages of ophthalmic inflammations, opium, in my opinion, is only useful in the sub-acute or chronic stages of disease. But even in these instances, Mr. Travers wrote, forty years ago,—"The vinous tincture of opium has acquired a nostrum-like importance, from its restorative operation in such cases; a virtue, I believe, not proper to it (a)." At the instance of the late Mr. Alexander, I, many years ago, got the wine of opium made without the aromatics, and since then this mode of preparing it has been adopted in the Dublin and other Pharmacopœias. Even in that simple state many persons complain of its pungency, and I have latterly been in the habit of prescribing it in combination with laurel-water.

(To be continued.)

ON

PARASITIC AFFECTIONS OF THE SKIN.

By T. McCALL ANDERSON, M.D.

Fellow of the Faculty of Physicians and Surgeons of Glasgow, &c.

No. IV.

The affection which I come now to treat of is one very different in appearance from Tinea tonsurans, although similar in nature, namely—

Favus.

(Disease due to the presence of the Achorion Schönleini.)

Scall-head—Honeycomb ringworm—Porrigo favosa—Porrigo lupinosa—Tinea vera (Lorry)—Porrigo-phyte (Gruby)—Erbgrind—Teigne faveuse (Alibert).

There is no cutaneous disease, the consideration of which I enter upon with greater pleasure than that of Favus. It affords one of those instances—alas, too rare in Medicine—of a highly successful mode of treatment, founded upon a correct knowledge of the nature of the affection. It is one of the best examples which could possibly be adduced of the great usefulness of the microscope in the investigation of pathological structures, and of the practical benefit resulting there-

(a) "Synopsis of the Diseases of the Eye." (1820.) Was it ironically or in jest, or from want of faith in any topical remedy, that Travers wrote as follows at p. 253, a few lines below the foregoing quotation:—"Some old women use their urine with admirable effect in these cases." The late Professor Wilmot used to relate an instance in which gonorrhœal ophthalmia was communicated to two persons by this means.

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from, one of the best refutations to the detractors of this most valuable instrument. It is not very long since favus was looked upon as a pustular disease, and regarded as incurable; or, if its true nature has sometimes been suspected, the appropriate treatment has been only partially or not at all put into practice. There are few dermatologists, if any, who now deny the presence of a vegetable parasite in the favus crusts, although there are very many who look upon its existence as altogether secondary, ascribing the origin of the affection to deranged nutrition, a view altogether untenable in the present state of our knowledge. Without entering into particulars to be treated of further on, I would merely state here, that the discoveries of the microscope, the results of the inoculation of the parasite on man, as well as on the lower animals and plants, the contagious nature of the disease, and the *astonishing and never-failing success* of the treatment form an ample refutation of the idea of its being a constitutional disease. There can be no doubt that, as the advances which have been made in our knowledge of this subject, thanks to the discoveries of our Continental brethren, become more widely disseminated, favus will come to be looked upon as a comparatively trifling disease, and that instances will cease to be met with of poor creatures frequenting our Dispensaries, their scalps covered with crusts, or changed into parchment-like structures, and their heads denuded of hair, objects of disgust to themselves and of loathing to those around them.

Favus attacks three different structures of the skin, namely the orifices of the hair-follicles, the epidermis and the nails. It most frequently attacks the hair-follicles and is much more usually met with on the scalp than on other parts. The course of this variety (*Favus pilaris*) is best studied on the scalp after the eruption has been temporarily removed by treatment. On examining it attentively little yellow specks are seen scattered here and there, and if one of these is examined with a magnifying glass it is seen to be a minute rounded, bright yellow crust depressed in the centre through which one or more hairs pass. These yellow crusts, at first so minute as to be hardly visible, and so beautiful, when viewed in this rudimentary state with the aid of a glass, gradually but steadily increase in size till at last they come to have a diameter of three or four lines, but still retain the rounded or at least the oval form, the central depressions in each of the crusts being very marked, and the deep yellow colour, very characteristic. On attentively examining one of these, its edges are found, in the early stages, to be somewhat *beneath* the level of the surrounding skin, but as it increases in size and in age, they gradually become more prominent and at last rise *above* the level of the epidermis. The surface of the crust also forms primarily a perfectly smooth depression, but this also in process of time disappears and a series of marks in the form of concentric circles, at first very indistinct, make their appearance and become more and more marked as the crust becomes older, till finally the depressed form disappears, and the crust, becoming more dry and friable, ultimately breaks up. The cup-shaped eruption can be raised from the subjacent structures with great readiness, and, if carefully done, there is left a circular depression covered by a very thin layer of epidermis, corresponding to the convex lower surface of the crust. If removed rudely, this layer may give way and a slight exudation of blood may even result. It is remarkable how soon the depression in the skin fills up. It appears that the crust when *in situ* causes compression of the subcutaneous tissue, but this latter, soon after the removal of the crust, regains its original volume owing to its elasticity, so that in the space of a couple of hours the depression is quite filled up. A new favus cup, however, shortly makes its appearance in place of the one removed, unless means be taken to prevent its formation. When these crusts are scattered here and there and do not encroach upon one another the name *favus lupinosa* is applied to them. But if, on the contrary, the number of the crusts increases greatly, and they become thickly set together, touching and encroaching upon one another, their circular depressed form is lost, they become partly detached, and form irregular masses of yellow crusts, quite different in shape from the characteristic cups of the former variety, and to which the name *favus scutulata* has been given. The edges of the patches in this variety are formed by a series of little segments of circles showing the remains of the original circular favus cups. Finally, there is a form designated *favus squarrosa* (or porrigo squarrosa) which is only met with when the disease has lasted a lengthened period of time. In this variety the crusts have completely lost their circular and depressed form and their bright yellow colour, and have assumed a dirty whitish tint. They are also almost completely detached from the scalp and remain entangled in the hairs. One cannot, however, regard these three so-called *varieties* of the disease so much in the light of varieties as of stages of one and the same affection, the favus lupinosa—scutulata—and squarrosa corresponding merely to the first, second, and third stages of the disease, and, consequently, we find the last-mentioned of these only in cases of long standing. The favus lupinosa is, however, not unfrequently seen in chronic cases, the disease continuing in its first stage. There are only three other symptoms to be mentioned to complete the picture, namely, the itching, the change in the appearance of the hairs, and the odour of the crusts. The itching is generally the first symptom which attracts attention, but it is not usually very violent although it occasions the patient to scratch the parts affected. It continues, as a general rule, more or less during the whole course of the disease, and is generally the cause, as we shall see, of the propagation of the affection from the scalp to other parts of the body. The hairs lose their shining appearance owing to the diminution of the sebaceous matter, from atrophy of the secreting glands. They look dull and dry, and assume an ash grey or more rarely a reddish colour. They break also more readily than healthy hairs, although their friability is very slight in comparison with that of the hairs in Tinea tonsurans, and this is the reason why this latter disease, as we have formerly mentioned, is far more difficult of cure. They are often in addition twisted or even split longitudinally and are much more easily extracted than healthy ones. Finally, when the disease had lasted a long time, they fall out, leaving patches of alopecia which is irremediable, the hair-follicles being destroyed. This destruction of the follicles is partly owing to the favus cups pressing upon them and gradually obliterating them, and partly to the disease occasioned in them by the presence of the parasite. In consequence of the destruction of the sebaceous glands and hair follicles, the skin of these bald parts is very dry, and when pinched up it appears brittle and has a great resemblance to parchment.

The odour of the affected parts is very characteristic, and is said to resemble that of mice, or of the urine of cats. Too much stress is, however, often laid upon this symptom, which should only be looked upon as an accessory one in arriving at a diagnosis, otherwise it is apt to lead to error, as impetigo of the scalp not unfrequently exhales an odour *not very different*. This is, no doubt, contrary to the statements of many dermatologists; but still it is of importance to state the difficulty which I myself have occasionally experienced with regard to it.

As before hinted, the disease generally commences with itching followed by the appearance of the cup-shaped crusts; but in many cases the pruritus is accompanied by an erythematous state of the skin. This redness accompanied by slight swelling and desquamation may be diffused or circumscribed, in which latter case it forms, according to Bazin, *minute* circles of a *very uniform diameter* which are distinguished by these two characters, their *small* and *uniform* size, from the circles of herpes circinatus, which have a variable diameter, and are sometimes very large. This erythematous condition is more frequently seen when the disease extends to the body; but it is probably just as frequent on the scalp where it is overlooked, from being hid by the hairs, or the disease has passed this stage before the patients find themselves obliged to seek advice. The yellow crusts soon appear in place of the erythema, or we may see the red patches at one spot and the cups at another. After the development of numerous crusts, secondary eruptions, generally of an impetiginous character, frequently appear, owing to the irritation produced by the parasite, which tend often to obscure the diagnosis and is the cause why dermatologists used to consider favus to be a pustular and not a parasitic affection. The irritation is also sufficient to produce in many cases engorgement of the neighbouring glands, which has erroneously been regarded as of a scrofulous nature.

Lice are often to be met with on the head in great abundance, the filthiness which is a powerful predisposing cause of favus, tending greatly to their development also.

When the disease attacks the scalp, it may be limited to

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one or several small scattered patches; but more usually, commencing in this way, these patches gradually extend and unite, large diseased surfaces are produced, and the whole scalp becomes gradually involved, unless proper therapeutic indications are resorted to. The scalp is *almost invariably* the part of the body first affected, and the disease is transmitted, in process of time, to other parts in this way. The patients, urged by the itching, scratch their heads, by which means, portions of the crusts are carried away beneath the nails, and, on scratching some part of the body afterwards, the spores are inoculated and give rise to the disease in these parts. Hence it happens that almost all cases of favus of the head of very long standing, are complicated with favus of the trunk. There is hardly any part of the body where the favus cups cannot develope themselves because there are few parts altogether void of hairs. This is taking for granted that a favus cup *always* developes itself in the orifice of a hair-follicle, which I believe to be the case. Many cite as an argument against this view, that a favus cup has occasionally been seen on the *glans penis*, but even in such cases, the rudiment of a hair can be detected when carefully looked for (a). This disposition of the cups around the hairs is certainly owing to the spores of the parasite falling into the hair-follicles, and there germinating. A still further corroboration of the view that the presence of a hair-follicle is necessary for the production of each favus crust, is the undoubted fact that favus lupinosa—and rarely the confluent variety of favus—is met with on the body, and simply because there are not sufficient hair-follicles on the body, in the great majority of cases, for the production of favus scutulata or squarrosa, the two confluent varieties of the disease. It may be asked, however, why more than one hair often traverses one favus cup. This is easy of explanation. For sometimes more than one hair comes from one hair-follicle, and even when this is not the case, it will be found that the supernumerary hairs traverse the crust obliquely, and merely pass through it, owing to their having this direction. These are, therefore, only accidentally involved in the crusts, and are not *necessarily* diseased, unless the follicles from which they proceed are also affected. When other parts than the scalp are attacked, it is generally the arms or the legs which are the seat of the crusts. They are to be met with, however, on the body and face, and I lately saw a case where a series of cup-shaped crusts formed a sort of semicircle round the tip of the nose.

Favus of the Epidermis is much more rare than the above variety, and has not been much noticed in English works on Dermatology. I have seen it several times, but always in conjunction with, and, as it were, a complication of, favus of the hair-follicles. It has not at all the characteristic appearance of the latter, and has, doubtless, been often overlooked in consequence. There is slight redness of the epidermis of the affected parts, upon which a very thin scaly-like crust forms, which is difficult of description, as it varies somewhat in appearance, having sometimes a great resemblance to a spot of pityriasis, but oftener to a thin small crust of eczema. These patches are usually of no great extent, and are scattered here and there; they have a white colour, marked by *yellow streaks*, and it is in these yellow portions that the favus matter is detected in abundance.

The white portions of the crusts consist almost entirely of epithelial cells. The nature of the patches may be at once suspected, from their appearing on the skins of persons affected with the follicular variety of the disease, and the use of the microscope will clear up all difficulty. A case of this variety, apparently attacking the scalp, is described by Bennett under the name of *Parasitic pityriasis* (b).

(To be continued.)

(a) "M. Lebert, ayant observé un godet favique sur le gland, en a conclu qu'il n'y a pas de rapport nécessaire, indispensable, entre la forme urcéolaire et la présence d'un poil. Mais je suppose que M. Lebert, trop confiant dans les assertions des anatomistes qui n'admettent pas de poils dans cette région, n'aura pas mis tous ses soins à découvrir ce poil dont il nie l'existence; car, nous-même, que avons été assez heureux pour observer, comme M. Lebert, un godet sur le gland, avons pu très-aisément constater, à l'aide d'une loupe, un poil rudimentaire au centre de la dépression favique."—Leçons théoriques et cliniques sur les Affections Cutanées Parasitaires" par le Docteur Bazin, (1858,) p. 90.

(b) "Clinical Lectures on the Principles and Practice of Medicine." Edition, p. 793.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

CONDUCTED BY

JONATHAN HUTCHINSON,

Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital,

AND BY

J. HUGHLINGS JACKSON, M.D.

ST. BARTHOLOMEW'S HOSPITAL.

PARTIAL DISLOCATION OF THE FEMUR INWARDS AT THE KNEE-JOINT—REDUCTION.

[Reported by Mr. GREENHILL, House-Surgeon.]

J. P., aged 53, a tall and stout man, was brought to the Hospital on December 10 with dislocation at the knee. The internal condyle of femur was thrown inwards and was tightly stretching the skin, while the external condyle was resting on the inner articulating surface of the tibia. The patella was very moveable and thrown outwards. He stated that as he was walking over two wooden planks, his right foot slipped between them and then became fixed, while the whole weight of his body was thrown over on to that side. In reducing it he was put under the influence of chloroform. Two broad bands of sheeting were passed round the limb, one just above, the other below, the knee, and extension was made outward by the upper one and in the reverse direction by the lower. A tolerable amount of force was required to be used before the bones were returned to their natural position. Next day there was no particular heat about the joint nor pain. He left the Hospital the middle of January with tolerable power in the limb, but with a limited power of flexing it.

NECROSIS OF THE LOWER JAW, OCCURRING IN A LUCIFER-MATCH MAKER.

The following case appears to be one of those in which necrosis is produced by the fumes of phosphorus. A boy, aged 19, a patient of Mr. Stanley's, has been four years in the trade, his part of the work having been piling the matches after they were dipped. The fluid in which they are dipped consists chiefly of an emulsion of phosphorus in glue, with chlorate of potash, or oxide of manganese. The mode in which the phosphorus acts so as to produce necrosis of the lower jaw is a disputed point. Some assert that the fumes are only hurtful when they come in contact with the periosteum or the alveolus, and hence that those who have bad teeth often suffer. Others hold that the phosphorus is inhaled, and thus acts on the jaw as mercury does on the salivary glands, or lead on the muscles. Mr. Stanley's patient says that he had no bad teeth before the disease began, but we can not place much reliance on his statement, as he would not be likely to know whether the disease produced the decay in his teeth, or the decay preceded the necrosis. It is clear, however, that he has lost several teeth since which are not decayed. The disease is on the left side only. Several pieces of bone have come away, and all the teeth in this side from, and exclusive of, the bicuspid have come out. There is now much swelling of the face on this side, and a sinus in the cheek, leading down to dead bone. The necrosis does not appear to extend much beyond the alveolus. He has generally had good health, and since the necrosis has not had worse health than usual. He is taking the iodide of potassium.

The red, amorphous variety of phosphorus does not emit any fumes, and does not so readily take fire. Attempts have, therefore, been made to use this form of phosphorus instead of the ordinary one in making lucifer-matches. Should they succeed, it may be expected that cases of similar nature to the above will be much less frequently met with.

INJURY TO THE HEAD—CEREBRAL SYMPTOMS WITH OTORRHŒA.

The following case is interesting as illustrating the after effects of injuries to the head. It is well known that persons who have had an injury, apparently slight, will

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even long after apparent recovery, suffer severe cerebral symptoms, often ending in death. Not unfrequently in such cases abscess of the brain is found at the post-mortem, apparently caused by disease of the bone at the site of the injury; just as abscess in the brain or cerebellum results from necrosis of the petrous bone. Frequently in both these instances the disease of the brain is produced not by continuous extension, as inflammation of the membrane, etc., but by purulent transmission by the veins. In the following case in which cerebral symptoms have been frequently set up since an injury to the head two years ago, they are probably due to inflammation of the membranes. The patient is a man, aged 22, who was admitted into St. Bartholomew's Hospital under the care of Mr. Lawrence, on October 11. He says that two years ago he was thrown from horseback and alighted on his head. He was for a time insensible,—for six weeks, according to his own account. Probably during this period he was in a semi-conscious condition. There was at first a discharge from the right ear of blood, and then he says of "humours." He recovered; but how soon, and how he has remained up to his admission is difficult to ascertain. He was discharged from the army, and he says that he has not been able to follow any occupation for a long time. He was admitted for an attack of meningitis. He had a strong pulse, violent headache, hot scalp, and delirium. From his right ear there was a discharge of pus. He recovered from this after the application of leeches and the administration of mercurials. He had afterwards several other attacks which were treated in the same way. He is now rather dull, low, and stupid, but has no pain, and calls himself well. The discharge from the ear continues, and he is quite deaf on that side.

UNIVERSITY COLLEGE HOSPITAL.

STRICTURE OF THE URETHRA OF TWENTY-TWO YEARS' STANDING—PERINEAL SECTION—CURE—DEATH FROM DISEASE OF THE LIVER TWO YEARS LATER—POST-MORTEM EXAMINATION OF THE PARTS.

(Under the care of Mr. HENRY THOMPSON.)

The following case is a very valuable one, as illustrating the permanent result obtained by an operation the advantages of which have been much debated. The parts removed at the *post mortem* were shown by Mr. Thompson at the last meeting of the Pathological Society and excited much interest.

A man, aged 53, recently died in University College Hospital, on whom Mr. Thompson had successfully performed perineal section in 1858. The cause of the patient's death was cirrhosis of the liver.

He first came under Mr. Thompson's care in 1856. He had then had stricture for more than twenty years, and had been often submitted to prolonged and various treatments. He was on that occasion (1856) treated by dilatation, and discharged after two or three months, being able to pass a No. 10. The stricture had, however, given way very slowly.

In 1857 he returned to the Infirmary as bad as ever. He was, however, again relieved by dilatation.

In 1858 he returned once more in the same condition, and the same treatment was tried, but it was less successful this time, as the symptoms were very severe, and the stricture very resisting. Mr. Thompson divided the stricture externally by a single incision from behind forwards. This was done in University College Hospital in September, 1858. There was scarcely any bleeding seen; no pain worth mentioning. No. 11 was passed into the bladder afterwards, and no single bad symptom followed. He was discharged one week after the operation, able to pass a No. 11 for himself.

He continued to pass an instrument never smaller than No. 9 ever after, and never had any symptoms from the stricture worth complaining of. Towards the end of 1860 he began to suffer from symptoms of organic disease of the liver and kidneys. He had severe ascites, and died after one week's confinement to bed, in the first week of the present year, 1861.

Autopsy.—There was cirrhosis of the liver and degeneration of both kidneys. The bladder was large and somewhat sacculated. The remains of the stricture were visible in the posterior part of the bulbous portion of the urethra, as white fibrous bands interlacing outside or beneath the mucous membrane. Dividing these pretty equally, in the longitudinal axis of the canal was a very fine line, evidently that of the incision made two and a-half years ago. There was no puckering, no trace of cicatrix, and so far from there being any narrowing, a No. 9 passed with ease through the whole canal before it was laid open for the examination.

THE MIDDLESEX HOSPITAL.

CASE OF PELVIC HÆMATOCELE.

(Under the care of Dr. PRIESTLEY.)
[From Notes by Mr. GAMBIER.]

M. A. G., aged 27, was admitted into the Prudhoe Ward, November 24, 1860, under the care of Dr. Priestley. The patient stated that she had generally enjoyed good health until her marriage two years before, since then she had been less robust. During her single life menstruation occurred regularly, one period only intermitting. The catamenia were always attended with pain, and she suffered much at the period of their recurrence. Thirteen months after her marriage, she was delivered of a female child. The labour was not attended by any unusual difficulty, but a quantity of blood was lost before the expulsion of the placenta.

The catamenia appeared a month after delivery, and subsequently recurred regularly, notwithstanding lactation. Some months after her confinement, during one of the menstrual periods, she fancies she took cold, and the sanguineous discharge did not pass off in the usual manner. Seven weeks later, having suffered from menorrhagia during the whole interval, she was seized with violent pains almost like the throes of labour, while cleaning her fire-place, and lost a considerable quantity of blood per vaginam. The urine was suppressed for two days, and at last drawn off by a catheter. Great pain and tenderness were present in the lower part of the abdomen, and a swelling was remarked above the pubis, which was not removed by emptying the bladder. She was obliged to keep her bed, and hot fomentations were ordered by her Medical attendant, but they increased the hæmorrhage without relieving the pain. The hæmorrhage took place in gushes as though something had burst with each attack, and the blood was not clotted.

Pain was constantly present in the hypogastrium, but was much aggravated at the time of the menorrhagic gushes. A sense of great weight was also complained of about the anus. The patient asserted that no coitus had taken place during the continuance of the menorrhagia. When admitted into the Hospital, two days after the attack of severe and sudden pain, the patient was very feeble; she was pale and exsanguine, and had other constitutional symptoms of loss of blood. There was no distinct evidence of tumour to be felt through the abdominal parietes, but the finger on entering the vagina encountered a large globular tumour half the size of a child's head lying between the uterus and rectum. The tumour was perfectly smooth and elastic, and quite immovable; it was somewhat tender to pressure, but had a much less amount of indurated deposit in its neighbourhood than is usual in pelvic abscess. The uterus was pushed forwards and downwards against the pubis, the os uteri being just beneath the arch. There was no hypertrophy or ulceration of the cervix uteri.

Some uncertainty being felt as to whether the tumour consisted of a gravid uterus fixed in a retroflexed position, the use of the uterine sound was withheld until the doubt was cleared up, and the patient was enjoined to keep strictly the recumbent position, and to take acetate of lead and opium pills with an acid mixture. The recurrence of hæmorrhage from the vagina was variable after this time, being seldom entirely absent, but sometimes coming on in gushes, with pain.

On December 11, a careful consideration of the case having left little doubt that it was one of pelvic hæmatocele, a sound was introduced into the uterus; it entered quite easily, and passed away from the tumour directly upwards and forwards, showing that the uterine cavity was not implicated in the swelling.

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On the following day a large quantity of dark blood was voided at stool, the chamber-pot being nearly filled; and the bowels were much relaxed.

On December 17 the condition of the patient was much alleviated, and an examination per vaginam led to the belief that the hæmatocele had discharged itself partially into the bowel, as a notable diminution had taken place in the size of the tumour. No further loss of blood, either from vagina or bowel, had occurred since December 12.

On January 12 the patient, having for some time been taking chalybeate tonics, was discharged at her own request, much improved in general health, but still suffering from a brown discharge, sometimes of a brighter tinge. A post-uterine tumour was still present, but it was much less in size than when the patient entered the Hospital, and it had then an irregular and nodulated outline, having entirely lost its former elasticity.

30th.—The patient was seen in the out-patients' room, recovery being still further advanced. Some blood had occasionally been passed by the bowel since she left the Hospital; but the uterus had regained its position in the centre of the pelvis; was much more moveable, and the situation of the previous tumour was only indicated by the presence of a certain amount of induration and thickening.

THE ROYAL LONDON OPHTHALMIC HOSPITAL.

WARTS ON THE CONJUNCTIVA.

Verrucæ of the conjunctiva, although an affection recognised and described by Ophthalmic writers, is now rare even at Ophthalmic Hospitals. A young man, eighteen years of age, came to Mr. Poland a few days ago, from the annoyance caused by a group of warts at the inner canthus of the left eye. They were small in size, and limited to the inner canthus, and did not produce any very evident deformity, but interfered with the play of the puncta, producing epiphora. They were small, and in appearance like warts on the penis, but were much softer, easily tearing on being taken up by the forceps. The man said that he had had them two years. A year and a-half ago they were cut off by Mr. Poland, and for a time he was relieved. On this last occasion also, they have been removed, and with considerable benefit. Mr. Poland stated that he had seen several such cases, and added that removal by scissors is the best treatment, but that they always return.

GUY'S HOSPITAL.

CASE IN WHICH AN ANEURISM WAS CURED BY COMPRESSION NINE YEARS AGO.

In the *Medical Times and Gazette* for 1853, vol. ii. p. 450, will be found the record of a case of popliteal aneurism treated by compression. The patient, a few days ago, applied to Mr. Poland, at the Royal London Ophthalmic Hospital, for some affection of the eye. The history of the case is briefly this:—In 1851, nine years ago, he was under Mr. Poland's care, in Guy's Hospital, for aneurism of the popliteal artery in the left side. He was then treated by compression, which was kept up for one hundred and two days, after which he was discharged. The aneurism was much reduced in size, felt hard and solid, but still pulsated a little directly backwards, but not laterally. The man remained well until October 20, 1852, when he "strained himself." Pulsation returned again and he was re-admitted, on this occasion under the care of Mr. Hilton, who submitted him to the same treatment. The treatment, on this occasion, only occupied three days, and the man was discharged in three weeks quite well.

There is now (1861) no trace of any tumour or pulsation in the popliteal space, and the man says he has had no inconvenience whatever since his discharge. He is in good health. There is no pulsation to be detected in the anterior or posterior tibials.

TWO CASES OF ANEURISM.

Mr. Hilton has at present under care a case of subclavian aneurism. The patient is a man, aged 38. It is now five weeks since the man first noticed the swelling, but he had had pains for some time in the upper part of the arm, not running down into the forearm or fingers. The aneurism appears to be situated nearly at the junction of the subclavian with the axillary. Ice has been applied and digitalis given. On January 30, Mr. Hilton determined to commence the treatment by digital compression. The man appears in good health. The compression treatment has been tried, but without success.

Mr. Cock has a case of popliteal aneurism under his care. Compression has been tried, but the man was very intolerant of it, and ulceration was produced. Mr. Cock, therefore, on Saturday week ligatured the femoral. The patient, whose external iliac Mr. Paget recently tied for the cure of femoral aneurism, is now nearly well.

NOTES OF THE

INFLUENCE OF THE RECENT COLD ON HOSPITAL PRACTICE.

It might have been expected that the fortnight or more of unusually severe cold which we experienced immediately before and about the commencement of the New Year, would have been productive of very noticeable effects on the health of the poorer classes. More especially might such have been anticipated from the circumstance that the period referred to was to many one of great privation, as regards food, fuel, and clothing. The Registrar's Reports prove that it was one of very greatly increased mortality. As regards the practice of our large Hospitals we have not, however, been able, after rather extensive inquiries, to make out that any very appreciable influence has been noticed. No particular class of diseases has been unduly prevalent, with the exception, perhaps, of broncho-pneumonia which, according to the impressions of most Physicians, has been very common. It may, perhaps, not be uninteresting to our readers if we glance briefly at some facts, most of them negative, which have come to our knowledge in the course of visits to the different Hospitals.

All familiar with the social habits of the poorer classes, are acquainted with the fact that Hospitals clear out rather extensively about Christmas. The present winter has, we believe, been no exception to this rule; and, despite the distress believed to be prevalent, most of our larger Institutions had numerous vacant beds during Christmas week. During the early part of the frost the number of accidents from falls was very large indeed. What with broken collar-bones, fractures of the humerus, Colles' fracture of the radius, etc., the casualty dressers at the larger Hospitals were almost unremittingly employed. At the London Hospital during one day, no fewer than five dislocations of the elbow backwards required reduction, and the same accident was noticed as very common at other Hospitals. Of the severer class of injuries, compound fractures, etc., there was no unusual prevalence, a circumstance which is, perhaps, explained by the less than usual extent of Christmas drunkenness, owing to the want of money among a large portion of the labouring poor.

Of severe frost-bites we have heard scarcely anything. In one instance, a coloured sailor was brought to the London Hospital, with both feet frost-bitten, and died of tetanus a week later. No other similar case has been admitted into that Hospital, or as far as our inquiries have extended, into any of the others.

Chilblains have been common in the out-patients' rooms, and became so more especially after the thaw set in, and whitlows also have been frequent; but neither of these affections appear from general report to have been more prevalent than they usually are at this time of the year.

That cases of cerebral apoplexy have been remarkably frequent has been a matter of common observation, and to this fact the Registrar-General's Reports have borne testimony. Our General Hospitals, however, do not appear to have experienced any material increase of their usual ratio of these cases. At the Moorfields Ophthalmic Hospital it so happened that almost no new cases of apoplexy of the retina were registered during the cold weather, nor has there been any increase in the average proportion since the thaw. The

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report of all Ophthalmic Surgeons with whom we have conversed, was that they had not noticed any cases of eye disease in which the coldness of the weather was supposed to have been the producing cause. In connexion with the subject of apoplexy and ruptured arteries, we may just note that an unusual number of aneurism cases are at present under treatment in the various Hospitals. This may, however, be merely a coincidence, as rare examples of disease are often noticed to come in batches.

Amongst the diseases which were very frequent during the cold, but respecting which it is difficult to explain its influence, was strangulated hernia. At the London Hospital during one week four cases required operation, the average of the year being about one a-week; and a similar ratio of increase was, we believe, observed at some other Institutions. To a certain extent, the same causes which increase the number of fractures and dislocations are likely to increase also that of strangulated herniæ; but few, however, of the patients in whose cases we had the opportunity of inquiry, referred the descent to slips in walking. One man who had been operated on for inguinal hernia, averred that his protrusion had occurred in consequence of his being "perished with cold," and without any straining whatever. He had felt the cold very acutely through the day, and whilst laying in bed awake and exceedingly starved, the hernia slipped down, and "he felt as though he could not help it." The expressions which he used suggested the possibility of there being a state of benumbing from extreme cold during which the reflex activity of the muscles tending to prevent hernia is partially suspended.

Boils and carbuncles have been frequent, as they always are in the winter months, but not more than usually so during the frost; cold and damp probably have more to do with the production of them than has clear frosty weather.

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Medical Times and Gazette.

SATURDAY, FEBRUARY 16.

SCHOOL HYGIENE.

Mr. Edwin Chadwick, although he has nominally retired from public life, is by no means disposed to be idle; he has a helping hand to give whenever any social or sanitary difficulty is to be encountered; and of late he has been stirring up the Metropolitan Medical Officers of Health to a little more active observation of the schools in their respective districts, and of their fitness or otherwise for promoting the bodily and mental development of the rising generation.

There are few of our Medical readers who are not, from time to time, closeted with anxious parents perplexed in their choice of a school. Good diet, good teaching, pure air, bodily exercise, and an adequate—but not excessive—amount of moral superintendence,—where are these to be obtained at moderate cost?

Of the great public schools, some are far too expensive for parents in the middle walk of professional life; others, spite of the opportunities of fresh air and active exercise, are defective in that discipline which protects the young against the cruelty and tyranny of elder boys. That boys must learn to fight their own way in the world is one thing; but that they should be subjected to the caprice of beer-drinking bullies in the upper forms, as is recorded in the pages of "Tom Brown," is but a way of making them sneaks and tyrants in their turn. To put them under the charge of the "ushers" at second-rate boarding-schools is worse; for the ushers must either be at deadly enmity with the elder boys, or must connive at their faults. At middling boarding-schools, too, the diet, though good on paper, is really defective in sound nitrogenous ingredients; the boys come home for the holidays with a chlorotic puffiness, too often the forerunner of some cachetic malady.

If the London parent, for the sake of moral guidance and good diet, choose to keep his children for the most part under his own roof, and to send them daily to some school within reach, he loses much of the sunlight, fresh air, and exercise essential to sound bodily development. Of such schools, Westminster appears to be the best, so far as intermixture of work and play, and space for play are concerned; but at most of the central schools, such as King's College, St. Paul's, Merchant Taylor's and the City of London School, even supposing the ventilation of the schoolrooms to be perfect, there is no space in which the scholars may go out and stretch their limbs and relieve their brain by the expenditure of muscular force. We say supposing the ventilation to be perfect, although we are informed on good authority that part of the schoolrooms at Merchant Taylor's and the whole at St. Paul's are, without doubt, as ill-ventilated as is possible. But, be this as it may, we observe that the authorities of the City of London School have determined that the hours shall be from nine a.m. to three p.m., with an interval of half-an-hour for refreshment. The system is nearly the same at St. Paul's and King's College,—a solid block of time, comprising the sunniest and healthiest part of the day,—all the daylight, virtually, during the winter months,—is devoted, without intermission, to in-door work.

This is one of the chief points of Mr. Chadwick's remonstrance. "However good," he says, "the sanitary condition of schools may be, however well they may be warmed, ventilated, and lighted, the common school time of five, six, or more hours of daily sedentary constraint, required from young, growing children, is injurious to their bodily development, and in violation of the laws of physiology."

And this not in reference to bodily health only, but to mental disposition likewise. "The irritation of body caused by the want of good air and active exercise," is, he tells us, "a probable source of the disposition to mischief, and of the more unfavourable and troublesome characteristics of town boys. In some large public establishments exclusively occupied by children, where systematised exercise has been given to them in the form of the military or the naval drill, or gymnastics, or labour in the field, with *half-time book instruction*, those unfavourable manifestations have been entirely suppressed. When, however, from ignorance, the drill has been discontinued, and the active bodily exercise has been greatly reduced, the troublesome mischief has invariably re-appeared, the premises and bedding materials have been injured, and irrepressible disorder in the schoolrooms or dormitories has arisen. But when active bodily exercise has been restored, and the suppressed energy which broke out in mischief has been allowed to have vent, the mischievousness has been invariably eradicated, and order and quiet sleep in the dormitories restored."

Rumours are incessantly brought to us of the evils of the "Competitive Examination," or "cattle-show" system; a system by which the brain is laden with a heterogeneous mass of details, and goaded into preternatural activity just for one day's display, to the neglect of that kind of training and acquirement which may be expected to bear fruit during

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a long life. This system is no more conducive to a tranquil, healthful state of intellect, than that fat is sound and healthy which the cattle-breeder loads upon the ribs of his beasts, well knowing that if not killed in the Christmas week, they would die of internal corruption in the next. So, too, the mayor of a county town hires for one day a gaudy suit to appear in at Court; but when he has doffed his ephemeral finery, he sinks again undistinguished into the commonplace citizen.

The Oxford and Cambridge Middle-Class Examinations, too, are alleged to be injurious and to defeat their own object; inasmuch as, instead of diffusing a more careful system of education over the whole of a school, they encourage the master to select a few sharp boys, work them up into a state fit to get a good place in the examination, and so to benefit the school by puffs in country newspapers, while the troublesome, and repulsive, and unteachable, who are the great mass of all scholars, and those who require the most care, are neglected.

But, if the undue straining of the mind be injurious in the case of children of the better classes, born with finely-constructed brains, and accustomed from their infancy to a more subtle and refined style of thought and conversation, much more so must it be in the case of the ambitious children of the humbler classes, who seek the office of master, or mistress, or pupil-teacher in National Schools. The pupil-teachers are youths of either sex, who, at sixteen years of age, or thereabouts, bind themselves apprentice to the master and managers of a National School, and undertake both to teach during school-hours, and likewise to study during play-hours, so as to qualify themselves to be teachers hereafter.

The amount of work exacted from teachers and pupil-teachers may be gathered from the following programme:—They must rise and breakfast in time to reach the school at 7 a.m.; from 7 to 8·45, private instruction of pupil teachers; from 9 to 12, teaching in school; from 12 to 1·30, dinner; 1·30 to 4, teaching in school; evening study, 6 to 9; daily school work always an hour in practice longer than on paper; from four to six hours' study, *at the least*, required from the pupil-teachers on Saturdays, if they are to meet the requirements of the Government Examinations.

It will be evident that this amount of brain-work, expended by children not well developed, requires to be balanced by most abundant diet, by great care of the skin, by judicious exercise, and sanitary arrangements of all kinds. But suppose it to be carried on in poverty and want, with no opportunity of air or exercise, and with the school-hours passed in a dark or even underground place? We can point to dark underground places under chapels at the West End of London,—the places that would have been devoted to corpses in the last century,—converted into school-rooms in this. It requires no prophet to foretell the influence such a system must exert upon health and morals. This forcing system, be it observed, is carried on under the direct superintendence of Government Inspectors of Schools.

We must not forget, in discussing the general evils of schools, the purpose which they serve of generating and propagating every kind of infectious disease. Poor children are sent from the close chamber of the artizan, with their skins unwashed, and their clothes saturated with animal vapour, to an infant school, where they sit in rows as closely packed, side by side, as it is possible to put them. A few days ago, a friend who visited an Infant School in a first-rate London parish, counted thirty-nine infants arranged in three rows. Each row was twelve feet long; and the three rows, back to front, five feet; so that the total superficial space was sixty square feet. He was told that the infants are always put close together, to keep them quiet. Whatever powers are possessed by damp, dirt, and heat in the production of disease, here come into the fullest sway.

Certainly there is ample scope for improvement in schools of all classes; and we shall be gratified at learning that the appeal made by Mr. Chadwick has stimulated the recognised conservators of the public health to some exertion in the matter.

THE WEEK.

Mr. Coulson's Hunterian Oration at the College of Surgeons on Thursday afternoon was a complete oratorical success. It was well written, admirably delivered, and received with repeated applause by the largest audience we ever saw at the College. After a short account of Hunter's career and a review of his works, the Orator proceeded to show how the Hunterian theory of life and organisation had led some of the most profound thinkers of the present day to develope the great law of Unity in all Natural Science. We hope to give some extracts from the Oration next week.

On Friday, the 8th instant, four poor men lost their lives in a branch of the Fleet Sewer, or, as it used to be called, the Fleet Ditch. This branch, which is said to run from Newgate to join the main stream in Farringdon-street, presents a curve at its termination, and so allows of the accumulation of gravel which is brought down the Fleet Ditch, and washed backwards and forwards by the tide in that ditch. It was to remove this gravel that the four men had entered the sewer; they had been at work there all Thursday afternoon, and resumed work at four o'clock on Friday morning. As they did not return to breakfast, a man went in search of them. With some difficulty, owing to a "strong sulphurous smell," he groped his way to a place where three of the poor fellows lay dead. A fourth, apparently, had fallen into the Fleet Ditch, and was carried down by the current and drowned there—his body was found late in the day. Mr. Wood, of St. Bartholomew's Hospital, to which institution the four bodies were taken, ascribed the death of the three men to asphyxia by carbonic acid; the fourth, apparently was drowned. A juryman complained of the stench from the Fleet Sewer during the last week. Mr. Haywood, Surveyor to the Commissioners of Sewers, described the Fleet Sewer, and the Fleet-lane branch in which these men were at work, as being sufficiently ventilated, and threw out the idea that the evolution of asphyxiating gas may have been due to the discharge of some refuse matter from *gas-works*, or from some chemical factory. Further experiments are being made to determine this point. Let us here call attention to two points which the professional and sanitary mind may watch with interest. Supposing the men asphyxiated by poisonous gas, the question is, Did that gas come from the illegal introduction of gas-washings, or other chemical refuse, into the sewer? This will be proved or not, as time will show. Or did it arise from the decomposition of the organic substances always present in sewers, stirred probably by the rising tide, and ascending the branch sewer in which the poor men were found? If so, a heavy responsibility may lie with the Surveyor whose duty it was to provide sufficient means of ventilation for sewers into which men descend to work, and for the rapid discharge of the matters which the sewers convey. But passing this point, do our readers know what the "ventilation of sewers" really means? Have they ever observed those rectangular iron gratings placed in the centre of crossings and roadways, and the steam that rises from them on clear frosty mornings? Have they ever had the misfortune to live near one, and to be saluted by its odours? If so, they will know that these orifices are the channels for allowing the gases of

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decomposition to mingle with the air of our streets and houses, and that one of them placed at the head, or blind end of a sewer, may give exit, in certain states of the wind, to the gases evolved for miles. Let it be borne in mind that the gases which escape only want concentration to destroy life.

The *Builder* makes a pungent remonstrance against the filthy condition of the London streets. Certainly it is inexplicable that, whilst starving men were perambulating them spade in hand, no one should have thought of giving them the easy task of shovelling up the mud. In two months' time, when the sun begins to have some power and the watering-carts begin their work, we shall be but too conscious of the sickly emanations from the mass of animal refuse which constitutes the chief constituent of London mud. On a Macadamised road mud is inevitable; but there is no excuse for it on pavement.

We beg to direct special attention to a paper we publish this week on the Statistics of Compound Fracture. We hope to be able to publish before very long two similar statistical papers for the same period of time: one on Amputations, by Mr. Holmes; and the other on Strangulated Hernia, a joint production. It is most desirable that the example of the officers of St George's should lead other Hospitals to keep and publish such statistics. Mr. Bryant's, from Guy's, are very valuable; but we are not quite clear as to their forming a perfectly continuous series, free from all selection of "interesting" cases. Until we get well-kept and continuous records extending over a long series of time from our large Hospitals, we shall never make much out by statistics. The commencement of such a scheme at St. George's was made by Mr. Holmes many years ago when he was Registrar, and was then favourably noticed by us. It is to be hoped that the authorities of all our London and Provincial Hospitals will apply something of the same system to all classes of cases. A complete scheme of published statistics would be most valuable to the whole Profession, and is certainly due from our large Hospitals.

The Lettsomian Lectures on Physiology were commenced on Monday, at the Medical Society of London, by Dr. Richardson. The subject of the course is entitled "Life and certain of its Phenomena." In the first lecture, Dr. Richardson dwelt exclusively on the process of oxygenation in animal bodies, illustrating throughout by reference to a series of experimental researches extending over some ten years of labour and incessant devotion to the pursuit. The chief points elicited were, that oxygen in the gaseous form is not to be considered as a simple body, *i.e.*, as of one character throughout, but as a ponderable substance diffused in an imponderable medium—caloric: that when oxygen combines with another body as carbon, with evidence of heat or electricity, the calorific or electrical agent presented is to be looked on not as *generated*, but as simply liberated from the material oxygen which is undergoing combination; in other words, that the caloric pre-existed in the oxygen; that in its effects on animals, oxygen is modified by quantity, by heat, by electricity, by re-respiration, and by the presence of certain agents, (of which ammonia is the great type), which by their mere presence suspend the combining power of oxygen, and so prevent all combustion. It is impossible in this brief note to indicate any of the details of a lecture devoted as this was to matters so abstruse, and in their bearings on practice so different from the ordinary line of Medical disquisition; suffice it to add that perhaps the largest audience we have ever seen at the Medical Society listened to the end with unbroken attention. Dr. Richardson's second lecture, announced for Monday next, is on "The Calorific Process in Living Bodies."

The decision of the Irish College of Physicians to give their Licentiates the title of Doctor, is likely to lead to serious legal complications. These Licentiates are entered as Doctors of Medicine on the Irish Register, and Dr. Hawkins is threatened with a *mandamus* unless he enters them in the same way on the General Register. He applies to the Executive Committee of the General Council, who apply in turn to Sir Hugh Cairns, who gives a totally opposite opinion to the Irish Attorney-General. So the Executive Committee order Dr. Hawkins *not* to comply with the wishes of the Irish College and their Licentiates. Dr. Hawkins, of course, obeys orders. We shall see what the Queen's Bench will say when the *mandamus* is asked for.

Amongst the events of the week are two fatal accidents by burning—the victim in each case a woman who passed between the table and the fire, so near to the latter as to set her clothes on fire, distended as they were with hoops. One of these poor creatures, a girl of eighteen, gave premature birth to a child in the midst of her agony.—Two children have been poisoned by eating coloured confectionery—long sticks with red stripes. The analysis is not yet made public.

One of the Committee of the Birkenhead Hospital and Dispensary has made the modest proposition that the Physician and Surgeon, in addition to seeing and prescribing for 2955 patients per annum at the Dispensary, should assist in the work of attending medically those patients who require to be visited at home. He did not offer any salary.

The *American Medical Monthly* speaks in the following gratifying manner of the Reports of Hospital Practice which appear weekly in these columns:—

"Of all the journals published in the English language, the London *Medical Times and Gazette* is the first, and so far the only one, that properly appreciates the present want of the Profession in regard to Reports of Hospital Practice, and that supplies that want in an entirely unexceptionable manner. If we be thought to go a little out of our way to state this fact, our earnest desire to have our own Physicians similarly benefited must be our excuse, as to have in any manner contributed in bringing about such a result would be sufficient reward."

Admiral Fitzroy thus explains the caution telegraphed to some of our sea-ports three days before the gale which proved so disastrous to our shipping last week:—

"Adverting to frequent expressions of surprise at the rising of a barometer with or before northerly gales, I would here repeat what has been reiterated and explained elsewhere—that the air is lighter, as well as warmer, during southerly winds; heavier and colder before and during northerly; and that the influence of either is shown by instruments some hours, if not days, before actual alteration is visible to ordinary notice."

UNIVERSITY OF DUBLIN.—The Shrove-tide Commencements were held according to statute on Tuesday, the 12th instant, in the Examination Hall of Trinity College, when the following degrees, etc., in Medicine and Surgery were conferred. *Licentiatus in Medicina.*—Burton, Gulielmus Edv.; M.B.—Ricardus Gulielmus Hare, Alexander Johnston, Shewbridge Connor (*antea per diploma*). C.M.—Ricardus Gulielmus Hare. M.D.—Franciscus O. Barker (*antea per diploma*), Howard B. Montgomery (*antea per diploma*), Thomas H. Babington.

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REVIEWS.

Traité pratique des Maladies de l'Enfance, Fondé sur de nombreuses Observations Cliniques. Par M. Barrier, D.M.P. Paris: 1861.

(*Practical Treatise of the Diseases of Childhood, Founded on Numerous Clinical Observations.* By F. Barrier, M.D.P.) Third Edition. Two vols. 1861.

This is what it professes to be,—a really practical treatise on the diseases of early life; and will form a valuable text-book for the student. The fact of such a bulky work having gone through two former editions is of itself sufficient evidence of its character. The present edition has been carefully revised and enlarged. This work excels in pathology and diagnosis; as regards treatment, we find ourselves very often at issue with the author; but as a whole there is much more of the practical English style about it than is common to most French works.

The different diseases of childhood are arranged under five great groups: 1. Those of the chest. 2. Of the abdomen. 3. Of the nervous system. 4. Of the organs of special sense, including the skin. 5. A group of various diseases, comprising rickets, scrofulosis, syphilis, dropsies, cephal-æmatoma, etc.

The two leading physiological conditions which, in the author's opinion, are most active in the pathology of early life, are—1. What he calls an excess of life or vitality over and above the vital activity; and 2. The imperfect condition of all the organs of animal life. Of the pathological tendencies, very great stress is laid upon the proneness to idiopathic catarrhal affections, *i.e.*, affections of the mucous membranes, characterised by hypersecretion. This not only influences the respiratory mucous membrane, but also the gastro-intestinal, and, though in a less degree, the genito-urinary. There is also a second group of symptomatic catarrhal affections occurring in the course of a great variety of diseases, such as the exanthemata, the fevers, dysentery, hooping-cough, lobular pneumonia, etc. In all these instances the catarrhal element very materially modifies the course of the disease, and often demands very special attention in treatment. It is from a conviction of the vast importance of this element of pathology that the author has devoted one chapter to the special consideration of "*Catarrhe en Général*," which is well worth a perusal. Throughout, the relation between the physiology of the mucous membranes and their pathology is observed, and the result which the author has arrived at is, that the aptitude of children to inflammatory and catarrhal diseases of the gastro-pulmonary mucous membranes depends,—First, on the normal functional activity of these mucous membranes, which is in evident relation to the catarrhal element. Secondly, the general activity of the capillary circulation, which is related to the inflammatory element; and, lastly, their irritability, which acts in the production of both these two morbid elements. If we look to the genito-urinary mucous membranes, their comparative freedom from these affections confirms the above theory.

Our space will not admit of any lengthy exposition of the mode in which the author treats the several subjects, but we will briefly allude to a few of the chapters which seem to us most worthy of attention. The admirable sketch of lobular pneumonia contains a great deal of novel and interesting matter, but we are surprised to find the author stating his opinion that this is a very common affection. He believes that four-fifths of all cases of pneumonia between the ages of one and seven years are of this variety; while those occurring before the age of one year are mostly lobar. We are not aware of any such opinion being entertained by any authority in this country, and it certainly deserves attention. His rate of mortality seems to be singularly high: of 61 cases 48 died. He follows the strictly antiphlogistic regime.

We are not favoured with any statistics on the practice of tracheotomy in croup, but the author is a very decided supporter of this operation. He feels, he says, "almost tempted to throw aside all other medications, and to place tracheotomy in the foremost place as the most certain means of cure."—(P. 407, vol. ii.) The operation, he thinks, ought never to be delayed when once we are sure of the existence of false membrane.

M. Barrier does not believe in the existence of idiopathic softening of the stomach; he regards it either as a post-mortem change, or as the secondary result of some other affection, the most common of which is thrush. To this we must demur: we are certain of having seen cases of softening without the existence of thrush, and *vice versâ*; and we can remember instances which are quite inexplicable except by the admission of such a distinct disease. Gastric and bilious fevers he calls "mucous fever," believing that the gastric mucous membrane is the primary seat of the malady. The disease may assume various forms, according to the character of the fever which is, as it were, tacked on to it; the remittent being the most common in children. On the subject of the treatment of typhoid fever we are surprised to find the author stating that antiphlogistic treatment is very often necessary, and still more to hear him recommending the use of purgatives. He says,—"We must not see a contra-indication in the diarrhœa, for purgatives diminish this, and sometimes even arrest it." We certainly cannot subscribe to this teaching.

The chapters on Diseases of the Nervous System are carefully and fully written, and evince a thorough acquaintance with the subject. There is an admirable account of the many causes of convulsions, with their diagnostic signs, which may be consulted with advantage. Perhaps there is hardly a subject on which greater ignorance prevails, or more mistakes are made. The Practitioner who would be successful, would find it very useful to "get up" this chapter, and we can recommend it for its truthfulness. The description of the morbid anatomy of tubercular meningitis is hardly so full as we should expect from such a source, but the same remark will not apply to any other branch of the subject. The author discredits all the reported cases of cure, and believes some error in diagnosis is made wherever such a result is believed to have occurred.

We should like to have noticed many other points in this most useful work, but our space will not allow; and we therefore take leave of it, in full assurance that we are only doing our duty in strongly recommending this as a good, sound text-book for the Student, and a valuable consultee to the Practitioner.

The Philosophy of Insanity. By a late Inmate of the Glasgow Royal Asylum for Lunatics at Gartnavel. Pp. 100. Edinburgh: 1860.

The autobiography of the insane is peculiarly valuable, inasmuch as it often gives a rational explanation of those acts which seem most irrational, and a clue to the necessary treatment.

The writer seems to have been an exceedingly irritable, nervous person, who upset his mind by excessive smoking, and by intense study in a "particularly exciting department of science," which he does not name.

"One night, after a number of weeks of fearful suffering, as I was lying in bed, tossing, sleepless and despairing, a most horrible impulse seized upon me, an impulse impelling me to destroy one, who, of all living beings, most deserved my love. I turned myself round in the bed-clothes and struggled with the hellish impulse till the bed shook. It still gained strength. I sprang up, clung to the bed-post, sunk my teeth in the agony of despair into the hard wood. It was uncontrollable. I shut my eyes, bowed down my head, for fear that I should see her, and rushed out of the house. Barefooted, with no covering save a night-shirt, I ran through the streets to the Police-office, and implored them to lock me up. Fortunately, the officer on duty was a humane and sensible man. He gave me a watch-coat to wrap round me, kept me under his own eye, and I suppose sent notice to my friends, for my wife and sister came with clothing. The paroxysm had passed, and gasping, panting for death in any form, I accompanied them home, steeped to the lips in despair.

"I had a little sickly boy, a special favourite on account of his helplessness; and after I was removed to the asylum, night and day the weeping and wailing of that child rung around me, and the cry 'I'm hungry, father, I'm hungry,' scorched my heart like fire. This to me soul-harrowing cry broke down what little reason I had remaining, and when my wife came to see me I insisted on taking my clothes off to give her to sell for food for the children. I inquired wildly for

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that child. How could I believe her when I heard him distinctly while she spoke, sobbing and crying, 'I'm hungry, father, I'm hungry.'"

The whole account which the author gives of his own mental state is deeply interesting, and deserves the study of those who have never regarded madness except from the sane side. We recommend it especially to the relatives of lunatics, and those who are in any way concerned with them, as it must tend to produce a more intelligent and humane style of treatment. The author speaks highly, and no doubt deservedly so, of the Asylum at Gartnavel, and the physician, Dr. Alexander Mackintosh.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

ON THE TREATMENT OF ECZEMA.

By Professor HEBRA.

One has the satisfaction (Professor Hebra observes in his Clinical Lecture) of knowing that we can always cure eczema, however long it may have continued, although in some inveterate cases depending upon a dyscrasis, or upon internal causes, there may be considerable difficulties in the way. As in most other diseases of the skin, the treatment should be purely local, internal measures being limited to the rare cases in which the eczema has been produced by a previously diseased condition of the economy, or when it is combined with some other affection. In the great bulk of cases internal means, such as mercury, antimony, iodine, purgatives, sarsaparilla, etc., are superfluous and mischievous. Arsenic is the only one of such means which exerts any influence in obstinate cases. Ordinarily, however, it is of no use, and its employment should be limited to the few cases which manifest especial obstinacy, the local treatment even in these also not being at the same time neglected.

Cold water, in its various modes of application, is of great importance, combined with other means, in the treatment of eczema. Employed alone it is far too tedious, and frequently not sufficing in its operation. It only aggravates the malady when applied in *eczema simplex*, arising from excess of secretion, as *e.g.* in the axilla, between the buttocks, etc. Starch, whether alone, or mixed with oxide of zinc (starch ʒj, zinc ʒiij) is, on the other hand, an excellent application when the eczema arises from the friction of two cutaneous surfaces, or from excessive secretion, as in the axilla, under the breasts, the scrotum, buttocks, etc. Oxide of zinc (ʒj, to ℥j of lard), sulphate or acetate of zinc, alum (ʒj to lbj of water), red or white precipitate (6 to 12 grains to ʒij of lard), are of good service in acute eczema or in chronic when there is but slight infiltration and the disease prevails only over a limited extent. When, however, there is considerable infiltration in chronic eczema these means do not suffice, and then the almost indispensable *schmierseife*,(a) by reason of its slightly caustic action, becomes the most preferable remedy. Its mode of employment varies according to the degree and extent of the eczema. When there is but slight infiltration, a rubbing with it once or twice a-day is sufficient; but when the infiltration is more considerable, a more frequent application is necessary, and even epithems composed of it may be required. When we have thoroughly rubbed the skin with the soap, until excoriations and red points have been produced, the surface should be washed and cold applications laid on until next rubbing. This procedure must be continued as long as the moisture and itching and the infiltration of the skin continue, and until the frictions no longer give rise to heat and excoriations of the skin. The soap must then be replaced by cold applications, and the treatment terminated by the employment of tar.

In many chronic cases, with great infiltration, the soap does not suffice, and we must have recourse to a stronger form of potash, viz. caustic potash, 1 drachm dissolved in 2 drachms of water. A pencil of charpie is dipped in this and well rubbed into the diseased parts for some minutes. These are then washed, and cold applications are kept constantly employed. One or two such cauterisations usually suffice, and when more are necessary they should not be repeated oftener than once a-week. Carefully applied, the caustic gives rise to no cicatrix, but the Practitioner must himself always undertake its application. It is a very painful procedure, and is not often required. Cauterising with strong acids is to be avoided, as it causes great pain and gives rise to scars. The application of the nitrate of silver is of no avail. *Tar* is in its way just as useful a remedy as the soap, the time for its application being when the moisture and itching have ceased, and exfoliation has commenced, *i.e.* when *eczema squamosum* is present. It may be used either alone or mixed with equal parts of cod-liver-oil, and should be applied by means of a brush once or twice a-day, carefully avoiding washing the parts or allowing water to come into contact with them. As long as any redness or desquamation continues, the tar must be repeated. Sometimes, when the application of the tar has been premature, moisture and itching are observed at certain spots, and the preliminary treatment has then to be resorted to again. Some individuals cannot bear the tar at all, it giving rise to severe inflammatory action. An ointment of acetate of lead or oxide of zinc should in such cases be substituted. *Cod-liver-oil* is a valuable external application, and by its aid alone we are able to cure the eczema when this has not lasted very long and the infiltration is not very considerable. It is also an excellent adjuvatory to the treatment by *schmierseife* and cold applications, as flannels soaked in the oil may be kept bound over the diseased parts during the night. Employed alone, the treatment is very tedious, and is objectionable on account of the disagreeable smell and befouling the linen which it gives rise to. Taken internally, it does not exert the slightest influence on eczema.—*Wiener Spitals-zeitung*, 1860. No. 2.

(a) For an account of this "*Schmierseife*," or *sapo viridis*, *vide Medical Times and Gazette*, 1860, vol. i. p. 224.

FOREIGN CORRESPONDENCE.

GERMANY.

Kissingen, February 4.

For many years Kissingen has been a favourite resort of invalids in search of health, and the names of the Rakoczy, Pandur, and Maxbrunnen springs are household words in many English families, whose members by their use have been cured of indigestion, deafness, and a host of other diseases. Of all German watering places Kissingen is perhaps the one which combines the greatest amount of natural remedial agents,—for besides the springs just mentioned, which contain a large amount of chlorides and sulphate of soda, together with iron, carbonic acid, and iodine, we have the Soolensprudel, the Theresienbrunnen, salt-vapour-baths, plunging-baths, mud-baths, carbonic-acid-baths, and last, not least, the "bitter-water," which was only added by Baron de Liebig in 1858 to our extensive stock of therapeutical agents. As the mode of employment and the chemical composition of the Kissingen bitter-water are up to the present time almost unknown in England, perhaps a short account of it may not be uninteresting to your readers.

As I have just mentioned, Baron Liebig was the first who, in 1858, made an accurate analysis of the bitter-water, and recommended its use for therapeutical purposes, upon which the Bavarian Government immediately took steps for carrying out the views of our illustrious Professor of Chemistry by erecting the proper buildings, appointing inspectors, etc. This water is in its composition and its medicinal effects quite identical with the bitter-water of Friedrichshall, with the difference only that in consequence of the greatly-improved method of drawing off the water the per-centage of the effective parts of the water is invariably the same; while the analyses of Kreutzberg, Bauer, and Baron Liebig prove that the water of Friedrichshall has a variable composition. The bitter-water of Kissingen contains in one pound:—

Sulphate of soda . .	46·5 grains.
Sulphate of magnesia . .	39·5 ,,
Cloride of sodium . .	61·1 ,,
Chloride of magnesium .	30·2 ,,
Carbonic acid . . .	5·9 cubic inches.

Besides small quantities of chloride of ammonia, bromide of

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magnesium, sulphate of potash, chloride of lithium, sulphate of lime, and carbonate of lime.

This water differs from the bitter-waters of Bohemia (those of Püllna, Seidlitz, Seidschütz, and Ivanda) in the larger amount of chlorides contained in it, while the latter contain more sulphates. The action of sulphates is different to that of the chlorides, as according to the researches of Professor Jolly, the endosmotic equivalent of the sulphate of soda is nearly treble that of the chloride of sodium. It is true that the sulphates cause a larger accumulation of fluids in the intestinal canal; but as these salts do not form part of the chemical constituents of the blood, and only small quantities of them are absorbed, their medicinal effect is restricted to the evacuation of the matters accumulated in the intestinal canal, and a protracted use of them disturbs digestion. On the other hand, the chloride of sodium forming an integrant part of the blood, it is readily absorbed into it, and by promoting the excretion of any abnormal organic matter contained in the blood, in many cases restores its normal composition. If the use of chloride of sodium is continued for a longer space of time, it effects a tumescence of the mucous membranes, and a too abundant desquamation of epithelial cells; while a proportionate mixture of the chloride of sodium and the sulphates prevents the injurious effects of either of these salts when taken separately; so that even persons of weak digestive powers may use this bitter-water for some time without the slightest inconvenience. The circumstance that the bitter-water of Friedrichshall combines these salts has rendered it widely celebrated, so that of late years it has entirely superseded those of Bohemia; and that of Kissingen now proves to be even superior to that of Friedrichshall, on account of its containing carbonic acid, which makes it more easy of digestion and less unpleasant to the taste. It is now extensively used together with the Rakoczy, Pandur, and Maxbrunnen, and proves especially useful for robust and plethoric persons who suffer from congestion of the head and lungs, with habitus apoplecticus; also, in atony of the bowels in erethic females, for whom the Rakoczy and Pandur are too exciting; and in congestion of the liver, scrofulosis, and other diseases. The experience of the last two years has, indeed, most amply proved the importance of the addition of the bitter-water to our remedial means; as several diseases may now be cured here, on which the springs of Kissingen had formerly not been able to exercise any beneficial influence.

The number of visitors at this place during the year 1859 has been less than usual, on account of the political disturbances which agitated Europe. There were scarcely any military men and Government officials here, and also very few Austrians and Frenchmen. While in 1858 no less than 4653 patients came here, there were only 3430 in 1859; and of these, 2385 were Germans, and 1045 foreigners. Amongst the latter there were 433 Russians and 239 English. The proportion during the several months was as follows:—In May there were 428, in June 1012, in July 1196, in August 728, and in September 66, so that June and July were the fullest months, while, for some years past, the patients had been most numerous in July and August. Experience has shown that the former proportion is more favourable to cures, as, in the treatment of abdominal diseases (of which most patients who come here suffer) regular exercise is of the greatest importance; and this is, of course, only possible in a moderate temperature, and not when the heat is oppressive, as in August. Too little stress has been laid on the circumstance, that the state of the weather exerts a very great influence upon the more or less favourable result of the treatment of the patients; for, in plethoric and congestive conditions of the brain, the lungs and the liver, in disposition to apoplexy, hypochondriasis, and hysteria, a far greater improvement takes place in May, June, and September; whilst complaints for the cure of which an abundant secretion of the skin is necessary, as chronic rheumatism, certain forms of gout, catarrh of the bronchial tubes, etc., are more amenable to treatment in July and August.

The state of the weather in 1859, with the normal transition of one season into the other, and the uniform heat during the months of June, July, and August, exercised a very beneficial influence upon the sanitary condition of the place; it was only in the latter part of August that, in consequence of the great heat, diarrhœa showed itself, which, however, did not present a serious character, and soon yielded to suitable treatment.

Most patients who came here were affected by diseases of the organs of digestion; and amongst these cases of chronic catarrh of the stomach, either spontaneous or in consequence of liver diseases, and the abuse of intoxicating liquors, were most frequent. The slighter forms of this affection are generally cured in a very short time by the internal use of the Rakoczy and Pandur, together with the warm brine-bath; but even very obstinate cases, which have existed for years, are very often cured. Some cases of simple ulcer of the stomach have also derived benefit from this treatment, but patients suffering from cancer of the stomach should never be sent here, as the internal use of the waters would only accelerate the growth of the tumour. Chronic catarrh of the intestines and habitual constipation are cured by the Rakoczy and the bitter-water. A special mention may be made of certain parasites, especially the Botryocephalus latus, which is observed in patients coming from Russia, Poland, Finland, and the eastern provinces of Prussia. Parts of this worm are often discharged during the first few weeks, and in some cases the patients have only learned by this discharge that they were affected by that parasite. Dr. Erhard, who is the most eminent Physician at this place, generally prescribes two or three drachms of the spirituous extract of male fern, and one or two ounces of castor-oil, after the Rakoczy has been taken for three or four weeks, and the effect is then always certain.

Among the cases of liver-disease, those which are most benefited here are such as hyperæmia of the liver in middle-aged patients, arising from a constitutional tendency thereto, or from want of exercise, too generous diet, and accumulation of fat in different localities. In such the Rakoczy, combined with the bitter-water, generally effects a cure: while hyperæmia of the liver arising from diseases of the valves or of the lungs are only rarely amenable to this treatment. It is true that in some cases of this kind alleviation is afforded, as has been recently confirmed by Professor Frerichs in his Clinical Treatise on Diseases of the Liver; but as most of our waters are of an exciting character, great caution is necessary in prescribing them; and if the disease of the valves or of the muscular substance of the heart is far advanced, the use of the waters is prohibited. Nevertheless, such is the confidence of Medical men in the remedial powers of these waters in hyperæmia of the liver, that a number of cases with far-advanced heart-disease and consecutive congestion of the liver and general dropsy are annually sent to this place. It is scarcely necessary to observe, that in such instances the fatal termination of the disease would only be accelerated by the use of our waters, and these patients are therefore invariably sent away.

Regarding icterus, experience shows that that form which arises from catarrh of the mucous membrane of the duodenum, or from fright, mental excitement, etc., is nearly always radically cured. Gall-stones are yearly discharged here in great numbers, probably in consequence of the increased secretion of the bile washing out the excretory ducts of the liver; and of course, the icterus due to them disappears at the same time with its exciting cause; while no good can be expected in icterus arising from cancer, cirrhosis, and other deep-seated disorganisations of the liver.

Cases of fatty degeneration of the liver generally improve, if the patients are sent here in an early stage of the complaint, if they are not yet too much weakened, have no disposition to diarrhœa, and anæmia is not yet to be observed; but the amyloid degeneration of the liver is as little benefited at Kissingen as it is at Karlsbad. Cases of simple induration and enlargement of the liver are also often sent here; we meet with them especially in hysterical Russian ladies, and the disease is often only recognised by a minute examination, as the hysterical symptoms are chiefly complained of, and hide the symptoms of liver-disease. These cases generally do extremely well. In tumours, atrophy, cancer, tubercle and cirrhosis of the liver, it would be folly to recommend the use of our waters, which would probably be only detrimental to the patients. As to diseases of the spleen, we not unfrequently see old tumours due to ague, which are generally cured by mud-baths and mud-cataplasms. Cases of enlargement of the spleen due to leukæmia have also been treated by each one of our remedial agents, but without the slightest beneficial result.

Gout has, as usual, furnished a proportionately large number of patients in 1859. Our waters have the effect of exciting the secretions of the intestines, of the kidneys and

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the skin, and thereby reducing the habitual plethora, eliminating the gouty poison, promoting a healthy metamorphosis of matter, and thus preventing paroxysms of gout. On the other hand, in cases of irregular gout, where the patient suffers from abdominal plethora, loss of appetite, hypochondriasis, sleeplessness, vertigo, the waters have the effect of inducing a paroxysm of gout. In such cases, generally, all symptoms increase in severity during the first few weeks of the treatment, when a paroxysm of gout takes place, which lasts for a week or a fortnight, after which the health of the patient improves rapidly. Cases of long standing, with structural lesions of the joints, the bones, the heart and the blood-vessels are generally more suitable for the thermal baths of Wildbad, Gastein, Teplitz, and Wiesbaden. In chronic rheumatism the warm brine-bath, with or without mother-liquor, carbonic-acid-baths, mud-baths, and if the skin and the nervous system are in a very atonic state, the cold brine-bath, in form of douches, do a remarkable amount of good.

In my next letter I shall give you the statistics of this place for 1860, and shall also make some observations on other diseases, which are beneficially treated here and which I have not mentioned in this letter.

GENERAL CORRESPONDENCE.

SPECIAL HOSPITALS.

LETTER FROM MR. HENRY THOMPSON.

[To the Editor of the Medical Times and Gazette.]

SIR,—In your last number there appears a letter the aim of which is to place me in a dilemma with regard to my conduct relative to "Special Hospitals" in general, and the "Hospital for Stone" in particular. It is signed by Mr. Armstrong Todd. I have never had any communication whatever with that gentleman on this or any other subject. I believe he never had anything to do with the institution he refers to at such length as "St. John's Hospital," and that he was not even in London at the time it was projected; although he is ready to make positive assertions respecting it and its internal affairs.

He must have gained his information, therefore, such as it is, at second hand; and relying on it, he avows his design to "expose me." He considerately writes, however, "it is hard to have to expose a Professional brother so openly." I am happy to relieve him from his uneasiness. He has been misinformed. The exposure fails, simply because the allegations are not true. But they are several in number, and must be dealt with *seriatim*.

1. Mr. A. Todd states that I was "promoter of, and Secretary to, the Protest Committee." I can simply reply, that I am not, and never was, Secretary to that committee. The gentleman, a well-known Hospital Surgeon, who filled that post, and whose name has been published as secretary in this and other journals, informs me that he was appointed at the first meeting of the committee, and that he has held the office to the present moment.

2. Mr. A. Todd states that I am "well known to be the instigator and chief actor in the opposition to the Hospital for Stone." I learn for the first time, and with amazement, that I am entitled to so much celebrity. That I should be "the instigator and chief actor" in a movement which has combined almost the entire Profession in London, which numbers among its supporters the most brilliant names in connexion with Medicine which the present age has produced in this country, would be to me, if true, a subject for the most complacent self-gratulation. But, indeed, it is too good to be true. I have had the honour of meeting many of those distinguished men on that committee. I have witnessed the unanimous and strongly expressed feeling evinced by them respecting this attempt to create a Special Hospital for Stone, and the repeated calm and deliberate discussions which preceded their declaration respecting it; but I have indeed been an insignificant unit in that goodly company. I accept the compliment, nevertheless, from Mr. Armstrong Todd, for there is much in his letter which is not designed to be complimentary.

3. Mr. A. Todd affirms that "I was one of the first who entertained the idea of founding an Hospital for Stone and other Urinary Diseases;" and he furthermore adduces a prospectus which he declares was drawn up by me, emphasising the statement by placing it in italics.

Again he speaks from hearsay, for he could have no possible means of knowing personally the matters of which he speaks. And again I must correct him. This necessitates a very brief sketch of my former connection with "St. John's Hospital." Whether I aided to found it or not will appear. That I put an end to it and declared it unnecessary and undesirable is certain.

In the spring of 1857 representations were made to me that a committee had been formed, with a peer for its chairman, for the purpose of founding an Hospital for Stone, particularly for its treatment by Lithotrity. I was informed that a gentleman, well known, and deservedly so, in the Surgical world, whose name there is no occasion to mention here, was to be one of the Surgeons, and that, if agreeable to myself, I could be the other. Having a strong opinion that lithotrity might with great advantage be more generally practised than it was at that time (a conviction I have steadily acted on since both in public and in private, and also know to be a growing one with the Profession here), I assented, and joined the committee.

That committee decided to issue a prospectus, and at least two of its number were deputed to draw it up. I am not sure there were not more. At all events, the gentlemen alluded to and I were fellow-workers at it, and we met more than once for the purpose. His share in the matter was, as it deserved to be, quite equal to mine; and what is more, the paper was subsequently once or twice revised in committee. In the first draft, I well remember, there were passages strongly objected to at the time, but the finally resulting prospectus was a compromise of all opinions.

To say, then, that I was the author of it, and to emphasise the assertion, as Mr. A. Todd has done, exhibits a most unwarrantable disregard of facts.

In the course of a short time, as I saw the practical working of the scheme, the conviction gradually forced itself upon me that it was for many reasons (which I am quite ready to give, if required) undesirable to carry it out. This opinion, when settled, I made no secret of, and repeatedly named to my fellow committee-men, resisting progressive steps which were pressed by others. Finally, I urged the dissolution of the whole affair, giving notice that I would move to that effect on a certain day. It was carried: and there was an end of "St. John's Hospital."

What could be more consistent than this; that I, avowing such sentiments respecting the old scheme, should join the great movement, when set on foot, against the new one?

I hold strongly the belief that lithotrity is applicable to the great majority of the adult cases of stone; provided that care, attention, and all the necessary appliances, are abundantly supplied. To give effect to that opinion was, in the words of the prospectus referred to, its "grand object." My experience has taught me that that object is quite as attainable in a large General Hospital as in a little special one; while numerous other grounds exist for believing that the interests of the patient, the public, and the Profession, will be better attained at the former than at the latter.

I am, &c.

February 11. HENRY THOMPSON.

EYE GLASSES AND FRONTAL MIRRORS.

LETTER FROM DR. SLOAN.

[To the Editor of the Medical Times and Gazette.]

SIR,—One of the most frequent operations in Ophthalmic Surgery that a Medical Practitioner is called on to perform, (if a matter usually considered so simple merits the name of operation,) is the removal of small portions of metal or stone impacted in the cornea. I have, however, found this occasionally more difficult than the extraction of a cataract or the formation of an artificial pupil.

This difficulty I have never experienced since I adopted the use, in such cases, of a watchmaker's eye-glass, which has the double advantage of showing the minute object under a magnifying power and leaving both hands of the operator at liberty. In removing inverted eye-lashes this plan is equally serviceable.

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This idea may have occurred to many of your readers; but as it was new to some of my Medical friends, to whom I mentioned it, I thought it worth making generally known. Some similar plan applied to the ophthalmoscope would, I have no doubt, facilitate the use of that instrument.

Following naturally on the last suggestion, and for the benefit chiefly of those of the poorer classes who work much by artificial light, and to whom the cost of such aid is of considerable importance, I may state that an oblong mirror, say six inches by three, formed of any reflecting substance (tin, for instance) attached to the brow, throws down on the work in hand, by the natural inclination of the head, an amount of light that nearly doubles the effective power of any of the ordinary means of illumination without increasing the strain on the eye, and in addition, acting as a shade.

I am, &c.

Ayr, February 11. C. F. Sloan.

BIRMINGHAM QUEEN'S HOSPITAL—OPHTHALMIC APPOINTMENT.

Letter from Mr. Edwin Chesshire.

[To the Editor of the Medical Times and Gazette.]

Sir,—Your article of January 12, on the Appointment o an Ophthalmic Surgeon to the Queen's Hospital in this town, contains opinions in reference to Special Hospitals, and to Ophthalmic Hospitals in particular, of so erroneous a nature, that, upon reflection, I am persuaded you will be among the foremost to correct the misapprehension which must inevitably arise in the Professional and public mind by a perusal of your leader. You quote from the speech of the reverend Chairman, Dr. Miller, who said:—"He thought when the general prosperity of Birmingham, by reason of the variety of its manufactures, was taken into consideration, the fact that its Hospitals were insufficient for the accommodation of the afflicted poor, was anything but creditable to the town." Sir, I join issue with the reverend Chairman on this point: not only do I deny the insufficient supply of Hospital accommodation in this town, but on the contrary, I contend there is a complete glut of it,—it is, in truth, a sad spectacle to witness the eagerness and avidity with which respectable, well-to-do tradesmen, and even professional men, seek and obtain the gratuitous advice and assistance of our public Hospitals, the truth of this assertion may be fully tested, and easily verified at any of the public Medical Charities, by submitting half-a-dozen questions to the Medical Officers of such Institutions; the replies to which, while they would undoubtedly corroborate my statement, would certainly be very interesting, and be a lamentable demonstration of the psuperising tendency of the age.

During the last fifteen or twenty years great additions have been made to the *in* and *out* accommodation both of the General Hospital and of the Birmingham and Midland Eye Institution; all the departments of the General Dispensary also, have been greatly extended, and the following Institutions have been founded and brought into active operation:—The Queen's Hospital, Lying-in Hospital, Ear Institution, Orthopædic Institution, Dental Infirmary, and a host of Self-Supporting Dispensaries, Vaccine Stations, Provident Societies and Clubs for the relief of the sick, to say nothing of Homœopathic and other Institutions of a more insignificant class. But, Sir, with regard to your own observations on Special Ophthalmic Institutions, and especially with regard to the Birmingham Ophthalmic Institution, to which your remarks may fairly be considered to apply, I would remind you, that that Institution has been established upwards of 35 years; that it has 24 beds, that it annually relieves upwards of 4000 in and out patients, and that about 100,000 sufferers have been relieved since its foundation in 1824, by that deservedly eminent Surgeon, Mr. Hodgson.

You say, the proper course is to enlarge the Medical Staff of General Hospitals, except in very large cities; is Birmingham with its 300,000 inhabitants a very large city? it has two Medical Schools; "and it is quite certain," you say, "that no 'management, appliance, or attention,' can be provided in an Ophthalmic Hospital, which ought not to be provided in special wards of those of our General Hospitals which are not restricted by want of funds. Beyond a dark curtain to the windows we cannot see what special management, appliance, or attention, can possibly be wanted; and there are none of the operations on the eye which any well-educated Surgeon, with a fair amount of practice, ought not to be able to perform with credit to himself and advantage to his patient." One can scarcely suppose these paragraphs were written with due consideration. Is the too often vitiated atmosphere of a General Hospital *very* conducive to quick union of the corneal section, after that most delicate operation, extraction: Would anyone, Sir, suffering from lenticular cataract requiring extraction, or acute glaucoma requiring the performance of iridectomy, permit even the most skilful Surgeon, if he were unaccustomed to Ophthalmic Surgery, to operate on his eyes? With truth has it been said, a man must poke out a hatful of eyes before he is competent properly to perform the capital operations on the eye; nay, more, it is an absolute necessity that the Ophthalmic Surgeon should not only be up to the operations on the eye, but that he should be regularly and habitually doing them. It is one thing to operate for lithotomy or hernia, or to amputate a limb, but it is another to extract a cataract,—an operation that presents an infinite amount of variety and difficulty. Have your readers forgetten the well-known restrictions that were placed upon the operative proceedings of that eminent Ophthalmic Surgeon, the late Mr. Tynee, by the Governors of Moorfields Ophthalmic Institution? Should you say, if that skilful Ophthalmic Surgeon were incompetent to perform extraction, "*any* well-educated Medical man" was competent? What course of study in Ophthalmic Surgery is required before a man gets his diploma? So far from agreeing with you as to the propriety of generalising operations, and especially eye operations, I am persuaded it would tend greatly to the public convenience, comfort, and safety, if a particular class of Surgeons were qualified to be solely operators,—I mean special operators. Is it not a fact that in all operative proceedings practice is essential to perfection?

I am, &c.

Edwin Chesshire, F.R.C.S.
Senior Surgeon to the Birmingham and Midland Eye Institution.

Birmingham, February 1.

GROWTH OF BONES AFTER EXCISION.

Letter from Mr. Edwards.

[To the Editor of the Medical Times and Gazette.]

Sir,—Mr. Henry Smith, in his recent letter to your Journal, expressed a wish that other Surgeons should contribute what evidence they possess upon the vexed question "do the long bones of the lower extremity grow after excision of the knee joint in young patients?"

An answer may frequently be found in the amount of bone removed: if it include part or all of that portion of the bone in which are lodged those elements "to the discretion of which whether we ultimately become short or tall is left entirely."—(Virchow.)

It is scarcely fair, however, entirely to ignore the "compensation system," which is so frequently exhibited in the bodily economy.

Allow me to lay before your readers the following cases:—

Case 1.—In January 1855, Dr. Brotherston, of Allos, removed the right knee-joint of a young gentleman, aged ten years, for ulceration of the cartilages.

I saw this patient three years ago walking well, and with a scarcely perceptible limp. The right leg was then one inch and two-thirds shorter than the other.

Dr. Brotherston informs me that both limbs have grown two inches every year since then, and the right leg is still one inch and two-thirds shorter than the other. The boy is well and strong, can join in the sports of other boys, and is attending the dancing-school!

Dr. Brotherston had already performed this operation on a boy in 1854, and kept the limb slightly bent, so that now the lad walks on his toes, but is well in every other respect, and the limb has grown in proportion to the other, but is of course shorter by the portions removed at the operation.

I have to-day measured the lower extremities of a girl, aged nine years, from whom I removed the right knee on February 20, 1857. She was then so wasted by disease, that we feared she would sink from the operation, and although no blood

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was lost, no vessel requiring ligature, she lay pulseless after it for several hours. She is now plump and fat, attending school regularly, and making herself useful in household occupations. I found that from the right trochanter to the upper edge of the tibia measured 9½ inches; from the left ditto, 10 inches: right tibia to sole, 11 inches; left ditto to ditto, 11½ inches. In circumference—Right thigh, two inches above the knee, 8 inches; left ditto, 10½ inches: right leg, around the calf, 8 inches; left leg, ditto, 8¼ inches.

I kept this child's leg slightly bent after the operation, and the angle somewhat increased afterwards, so that she requires a high heel, but undoubtedly the bones of her leg have grown during the last three years as much in proportion to the other limb as could be reasonably expected.

I am, &c. A. M. Edwards.

27, India-street, Edinburgh, February 5.

THE LATE DR. EDWARD BENTLEY.

[To the Editor of the Medical Times and Gazette.]

Sir,—The death of Dr. Bentley demands, I think, a rather more extended notice than a mere line in your Obituary, since, although not occupying a high position in the Profession, he was the founder of two very important institutions, viz, the City of London Hospital for Diseases of the Chest, and the Pathological Society of London. Dr. Bentley's *forte* in his Profession was peculiar; it did not lie in him to promote its interests in a scientific direction, and thus he differed remarkably from the late Dr. Baly (according to the admirable sketch you gave of our lamented brother in last week's Journal), but he was most admirably suited to look after its secular and social welfare. Thus he was notorious for founding Medical Societies and Clubs, some of which still exist in their private capacity, but the two above-mentioned institutions must of necessity perpetuate his name. Probably many of the more recent members of the Pathological Society are not aware that it was originated in Dr. Bentley's brain. When Secretary to the Clinical Society of Guy's Hospital he called together a number of his more immediate acquaintances to his residence in Trinity-square, Southwark, and amongst others were Drs. Barlow, Peacock, Lloyd, M'Key, Cock, Poland, etc., when Dr. Williams was nominated the first President. For some years past Dr. Bentley has been in comparative retirement, arising from ill health, and I believe also from pecuniary difficulties, dying at last from a prolonged nervous affection. There can be little doubt that the latter had much to do with the untoward cessation of his Medical career.

I am, &c.

February 11. M. D.

Foreign Medical Veterans.—Besides the examples of octogenarian Physicians whose deaths were recorded last week, that of Dr. Mannoir must be also added, he having lately died at Geneva in the ninety-third year of his age.

Report on Causes of Deaths of Infants.—According to Dr. Hauner's Report on the Munich Children's Hospital, there were admitted into the Hospital and its Dispensary during thirteen years 1846-59, 23,349 patients, and of this number 1492 died of the following diseases:—Catarrh. gastric. acut et chron, pædatrophia, 830; meningitis cachect. acut. et chron., 87; tubercul. pulmon. universalis, 80; broncho-pneumonia, pleuro-pneumonia, empyema, 78; cholera infantum, 52; bronchitis capillaris acut. et chron., 34; convulsions, 29; typhus, 28; cholera Asiatica, 26; morbilli, 22; laryngitis exsudativa, diphtheria, 20; tussis convulsiva, 21; debilitas vitæ congenita, 16; dysenteria, 15; syphilis, 15; rhachitis, 18; diarrhœa œstiva epidem., 11; diphtheria oris et faucium, 11; noma, 10; trismus, 10; scarlatina, 9; enteritis, 8; spasmus glottidis, 8; nephritis albuminosa, 7; erysipelas neonatorum, 5; hydrops universalis, 5; spina bifida, 5; phlebitis umbilicalis, 5; hydrops cerebri extern. congen., 4; caries, 3; pseudo-erysipelas, 3; coxarthrocace, 3; schirrus, 2; morbus macul. Werlhof, 2; pyæmia, 2; atresia ani, 2; sclerosis, 2; apoplexia cerebri, 1; apoplex. pulmon., 1; corpus alien. in larynge, 1; atrophia hepatis acutus, 1; lithiasis (sectio alta), 1; diabetes, 1.—*Journal für Kinderkrank.* vol. xxxv. p. 148.

REPORTS OF SOCIETIES.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, February 6, 1861.

Dr. Tyler Smith, President, in the Chair.

A letter from the executors of the late Dr. Rigby was read, in which it was stated that Dr. Rigby had left directions that his books on Midwifery and the Diseases of Women and Children should be given to the Obstetrical Society. In compliance with these instructions, the executors had forwarded the books in question—upwards of 220 in number—to the charge of the Honorary Secretaries. A list of these (which included the manuscript notes of lectures attended by the two Rigbys—father and son) was handed round for inspection by the Fellows.

It was moved by Dr. R. Uvedale West, seconded by Dr. Routh, and carried unanimously,—"That the valuable collection of books on Midwifery and the Diseases of Women and Children left to the Society by their late President, Dr. Edward Rigby, be made the nucleus of a library, to be called 'The Rigby Library,' and their sense of the value of the benefaction be duly recorded by the Council."

Dr. R. Uvedale West related

A CASE OF EPILEPTIFORM CONVULSIONS IN THE THIRD WEEK OF THE PUERPERAL STATE.

In this case, after some premonitory symptoms of headache, stomach and intestinal derangement, a lying-in woman was attacked, towards the end of the second week, with frequent fits of epileptiform convulsions, which persisted throughout the third week. There was slight albuminuria, and the fits themselves were followed by a condition of hemiplegia more or less persistent, with other alarming symptoms. The patient recovered under the use of remedies directed, in the first instance, to the relief of the gastric and intestinal irritation, which was looked upon as the chief exciting cause of the symptoms observed, and, towards the decline of the disease, to the removal of the anæmic and debilitated condition in which the patient was left. The author concluded with the remark that this case, in which the patient recovered perfectly, and in which, therefore, there could not have been any cerebral mischief, notwithstanding the formidable appearance of the symptoms, shows how little we can rely on symptoms alone in forming a diagnosis in cerebral affections, especially when the case is compared with one, a report of which, by the author, was read before the Society last October, in which latter case, with less formidable symptoms, the patient died in a few hours, and serous effusion in the brain, with other cerebral disease, were found on a post-mortem examination.

Mr. Robert Druitt related a case of

PUERPERAL FEVER COMPLICATED WITH DIPHTHERIA, IN WHICH LIFE WAS SAVED BY THE TINCTURE OF SESQUICHLORIDE OF IRON.

A healthy woman, aged 42, was attacked on the 7th July, after labour, with shivering and violent pain in the left leg. The pain soon left the leg, and seized the left side below the mamma. There were extreme restlessness, heat of skin, and prostration. On the third day of the illness, violent fetid diarrhœa was established. On the ninth day, the diarrhœa had continued incessantly; the motions, thin, reddish, and offensive, passed involuntarily; the patient drowsy, wandering, and picking the bedclothes; when there came on great constriction in the throat, difficulty of swallowing, and copious salivation, together with a diphtheretic exudation at the back of the fauces. The most lavish administration of port wine, brandy, beef-tea, opiates, and quinine had failed to stay the progress of the malady, and the patient was evidently sinking, when, at the suggestion of Dr. Frere, who was called in consultation, the tincture of sesquichloride of iron was given. The effect was decided and unmistakeable. The contents of the alimentary canal were deodorized, and the diarrhœa ceased within twenty-four hours; and, spite of difficulty of swallowing and the throat complication, the patient rapidly became

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convalescent. The diphtheritic exudation extended over the posterior half of the soft palate. The upper lobe of the left lung was left consolidated; but in the twelvemonth which has since elapsed it has entirely recovered its normal condition. The quantity in which the tincture of steel was administered deserves notice. Three fluid ounces of the tincture were swallowed in five days, besides an ounce wasted in lavements. During the first day that it was given, the patient took two fluid drachms every two hours. It is evident that these doses did good, and it is probable that smaller ones might have failed.

A paper, by Dr. TYLER SMITH, was read on

OVARIOTOMY;

With Cases, and remarks on the different steps of the operation and causes of its mortality. The paper commenced by a reference to the proposal of ovariotomy by John Hunter, in 1786, and its first performance by Dr. McDowell, an American Physician, in 1809. The author maintained the operation to be justifiable on the ground of the favourable comparison which could be made between its mortality and that of some other recognised capital operations, such as amputation of the thigh, ligature of the subclavian, and adult lithotomy; and also between the extirpation of the ovary and simple tapping or tapping with the injection of iodine. It was shown that of 130 cases of simple tapping, 69 were dead at the end of one year, and 114 were known to have eventually died of the disease. Of 130 cases of iodine injection after tapping, 66 died or re-filled, and 64 were said to have been cured; but in these cases the nidus of the disease remained, and it might at any time recur. Of 395 cases of completed ovariotomy, 212 recovered, and 183 died; showing that, notwithstanding the acknowledged dangers of the operation, the results were more favourable than after tapping or injection. The author then proceeded to a detail of his own cases. *Case* 1. *Monocystic dropsy of the left ovary.*—The tumour was very large. This patient, fifty years of age, was operated upon on the 15th of October, 1860, and that day four weeks she was well enough to travel to Boston in Lincolnshire. She remains in good health. *Case* 2. *Polycystic disease of the left ovary.*—The operation was performed Nov. 15th, 1860. She had been previously tapped and treated by pressure. There were extensive adhesions. This patient was threatened with peritonitis, but in three weeks she was convalescent. *Case* 3. *Monocystic disease of the left ovary.*—She was operated on December 7th, 1860. There were no adhesions. The tumour was of moderate size. The patient went on well, and was convalescent at the end of a fortnight. *Case* 4. *Polycystic disease of the left ovary, of the colloid type.*—The tumour was of large size, and combined with ascites. Operation, January 4th, 1861. Four months before, the patient had been delivered of a child at the full term. There were extensive adhesions. In this case the recovery was slow, but she sat up about three weeks after the operation, and is going on favourably. The operations were performed by the short incision, the cysts being tapped and brought through the wound. The ligature was allowed to fall into the pelvis. A very moderate amount of opium was given, and stimulants were administered on the third or fourth day, in the absence of inflammatory symptoms. Great care was taken to guard the patients against any miasmatic or contagious influence. The author preferred the ligature to the clamp, on account of the straining caused by the latter in the event of vomiting or tympanitis. As far as statistics are known, the proportion of recoveries is greater when the clamp is not used. The following remarks on the causes of mortality, and the means of diminishing it, concluded the paper:—"Nearly 17 per cent. of the fatal cases have occurred from shock or collapse. This source of mortality should be met by resorting to the operation before the patient has reached a state of exhaustion. It is not in many cases decided on till the patient is in such a state of weakness as to be unable to bear this or any other operation. Except in cases of extensive adhesion, there is nothing necessarily belonging to the operation which should produce dangerous shock. This source of danger will be diminished when the operation becomes generally recognised as an established and necessary proceeding in suitable cases. Improvements in diagnosis will doubtless lessen the number of cases in which the abdomen is opened without finding ovarian tumours. Earlier operation would also lessen the number of cases in which adhesions occur. Exactly 16 per cent. have died from hæmorrhage. All, or nearly all, of these may be prevented by care in tying the pedicle, and in securing hæmorrhage from the separation of adhesions. The ligature should never be left until we are quite sure that all bleeding has ceased. One source of the bleeding has been the use of the ligature without transfixing the pedicle. There is a notable increase of mortality where the pedicle is tied in one mass, as compared with transfixion and tying in two or more portions. Peritonitis is by far the most fatal complication which can occur. Not less than 43 per cent. of the fatal cases have died in this way. Looking to the histories of the cases thus lost, it can, I believe, be shown that peritonitis does not depend so much on anything inherent in the operation itself, as upon miasmatic or contagious influences. This seems proved by the great mortality after the operation in Hospitals as compared with private practice. It is difficult to get a successful result in a large Hospital, yet the operations are nowhere more skilfully performed, nor the after-treatment better. Peritonitis following ovariotomy is evidently in the majority of cases not simple inflammatory peritonitis, but a disease closely resembling puerperal fever, like it commonly due to some external poison. This is the only way in which the excessive mortality after the operation in Hospitals in this country and on the continent can be explained. The ovariotomy patient is as susceptible as the puerperal woman, or even more so. Such cases cannot safely be collected together or mixed with other patients; and in the long run I believe the results cannot be as favourable either in General or Special Hospitals as under other circumstances. In the operations detailed every possible care was taken that they should be performed under good sanitary conditions; that as few persons saw the patients or were present at the operations as could well be; and that nothing came near them in the shape of contagion or infection. Each patient was treated, in fact, as we should treat and guard a lying-in woman, and to this, more than to anything else, I attribute their success. By care of this kind we may probably diminish this the greatest source of mortality to a considerable extent. The three causes which have been dwelt upon—namely, shock, hæmorrhage, and peritonitis—represent upwards of 75 per cent. of the total deaths after ovariotomy."

Mr. BAKER BROWN congratulated the author on his great success, and also on his having become a convert to ovariotomy, and hoped that many other Hospital Physicians and Surgeons, who had hitherto opposed the operation, would follow his example. He (Mr. Brown) observed that the author had only mentioned two plans of treatment—namely, tapping simply, and tapping with injection of iodine. Besides that of complete extirpation, there was, however, another which he (Mr. Brown) had for many years advocated, and which had received the sanction of many members of the profession—namely, tapping and pressure. This mode of treatment was only applicable to monocystic forms of the disease. He could mention many cases of several years' standing, which had been cured by this treatment. In one, particularly, where the lady afterwards married, and has since been delivered by him of four healthy children. In the last year he cured three patients in the London Surgical Home, and there was another, apparently cured, still under observation. He thought that the author had not fairly stated the advantages of tapping with injection of iodine, which in unilocular cysts has been often used with advantage. He had himself reported some cases of cure, as also did Mr. Spencer Wells about two years ago. As regards the administration of opium after the operation, he (Mr. Brown) had, as the author observed, been in the habit of giving opium in all cases, as had also been done by Dr. Clay, of Manchester; but latterly he (Mr. Brown) had been guided in this matter by the pain, proportioning the amount of opium to the severity of the pain, which he regarded as a physiological evil to be removed if possible. He generally gave it by the rectum, as in many cases it does not cause the same amount of sickness as if given by the mouth. He then alluded to the length of time the ligature, had remained in the abdomen: in one case seven, in another eleven weeks. He thought that this must have arisen from one of two causes: either that they were not tied tight enough, or that too much of the peduncle had been taken up by each ligature. The average time in his experience, and in that of Mr. Lane, had been from nine to ten days. He (Mr. Brown) could not agree with the author in his exclusive use of the ligature, allowing the pedunele to

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drop into the abdomen. The practice that he adopted was, to use the ligature where the peduncle was very short, and could not be kept outside the opening without dragging too much upon the uterus; on the contrary, where the peduncle was long enough, he preferred securing it by clamp or otherwise on the outside, as the wound healed quicker, and the patient was sooner convalescent. The objection to the weight of the clamp was obviated by using a pair of common carpenter's calipers. These could generally be removed on the second or third day. In two cases lately, in which he had operated successfully in the London Surgical Home, he had removed them on the third day. In reference to the sutures, he thought that when the author had tried the silver wire sutures, he would find them far better than the silk; they were more readily applied, and three or four deep ones were sufficient without the interrupted sutures. He thought that the success of the author was due in a great measure to the fact that none of his cases had been tapped, except one, and that only once, as he believed that the best cases for operation were those which had not existed long, and in which the abdomen had not been disturbed by repeated tappings, and the constitution drained by the constant refilling of the cyst. He thought that the paper of the author would do much good towards a fairer trial of ovariotomy, and that the difficulties which the old operators had hitherto had to encounter among the great majority of the Profession would be materially lessened by the addition of such an authority.

Mr. Spencer Wells said he concurred with Mr. Brown in the opinion that the author had rather undervalued iodine injections in cases of single cysts. He (Mr. Wells) had employed iodine in five such cases, and four of the patients had remained without re-filling. In the fifth, the injected sac had either re-filled, or others had grown. In compound cysts he quite agreed with the author in regarding iodine as worse than useless. He differed entirely from Mr. Brown in the opinion that pressure was of use after tapping. Doubtless some single cysts had remained without re-filling after this treatment; but tapping alone was quite as useful without as with pressure. The pressure could have no effect on an empty collapsed cyst. In two cases in which he (Mr. Wells) had been prepared to inject iodine he had trusted to simple tapping, because, in each case, he found the fluid so clear and limpid that he believed the cyst was not truly ovarian, but one of those thin-walled, simple cysts of the broad ligament which collapse when emptied, and do not fill again, whether pressure be employed or not. As to the position of the patient during ovariotomy, he had tried, in three cases, the sitting posture as recommended by the author; but he very much preferred the recumbent position. The chloroform was less likely to induce faintness; there was less tendency to escape of intestines, greater facility in securing the peduncle or bleeding vessels, and it was not difficult, by holding the cysts well forward as they are emptied, to prevent the ovarian fluid from entering the peritoneal cavity. He quite agreed with what the author said as to the extent of incision; and partly so as to the mode of securing the peduncle. After using the clamp in four or five cases, he had abandoned it, except as a very convenient and rapid mode of securing the peduncle for a few minutes while the tumour is separated and the wound closed. Ligatures may then be used below it, and it may be at once removed. In the two cases of tetanus, he did not believe the clamp had anything to do with this occurrence. In one case the tetanic symptoms did not appear till the fourteenth, and in the other till the eighth, day after operation; yet the clamps came away on the third or fourth day. The objection to the fixing the peduncle to the abdominal parietes suggested by the author, that increase of the uterus during pregnancy might be interfered with, was not borne out by a case in which a patient upon whom he had so fixed the peduncle had borne a living child thirteen months after ovariotomy. He differed very strongly from the author in his practice of leaving the tied stump of the peduncle within the peritoneal cavity. He (Mr. Wells) had been obliged to do this in two cases out of the twenty-one in which he had operated. One of these patients recovered, but her state was very alarming for some days, and convalescence was much more protracted than in any other he had seen. The other died thirty hours after operation with all the symptoms of putrid infection, and he had no doubt but that such putrid matter as may be seen to come away when the peduncle is kept outside the wound was absorbed from the peritoneal cavity, and poisoned this lady. The length of time occupied by the separation of the ligature when it was left inside was a source of great anxiety to both patient and Surgeon. In some recorded cases, it had remained from thirty to forty days; whereas, when fixed outside, it separated in three or four, or at most eight or ten, days, and then the wound healed, and all anxiety ceased. He thought the Profession greatly indebted to the author for bringing forward these cases, as they would strengthen the hands of those who were endeavouring to prove that ovariotomy has been at least as successful as several other important operations, and a means of restoring many patients from a state of hopeless suffering to one of perfect health.

Dr. Graily Hewitt thought that the principal point in the paper read before the Society had been lost sight of or passed over by the two gentlemen who had favoured the meeting with their observations. He alluded to the opinions expressed by Dr. Tyler Smith as to the cause of a large proportion of the mortality after ovariotomy, and the best means of combating it. He agreed very much with the conclusions of the author, that in many cases the symptoms and condition of the patient in fatal cases resembled those observed in puerperal fever. With the deduction, that it is of vital importance to prevent the patient from being subjected to the action of deleterious matters introduced from without during or after the performance of the operation, his reading, experience, and observation induced him most fully to concur. He believed that the reason that in the General Hospitals of the metropolis the mortality after ovariotomy had been so considerable as compared with the results obtained in private practice and elsewhere, was to be found in the fact that this source of danger had been too little recognised. The high mortality in question was hardly to be explained except by this supposition, and he was of opinion that on a thorough recognition of its truth and importance depended the future success of the operation of ovariotomy.

Dr. Tyler Smith said he could assure Mr. Brown that the ligature had in each case been drawn sufficiently tight. He had before his eyes too vivid a sense of the danger of hæmorrhage to omit this. He had not seen any great results from tapping and pressure. He had patiently and carefully tried tapping and the injection of iodine, and had been disappointed. He could give the particulars of twelve cases of injection. In one, death occurred within forty-eight hours. In two others, death took place at longer intervals, from inflammation of the cyst. In only two were the results favourable. In one of these he had lost sight of the patient six months after the operation; the other continued in tolerable health two years after the injection. The rest re-filled. He had not seen the evils mentioned by Mr. Spencer Wells as likely to follow when the tied peduncle is left within the abdomen. He should be inclined to doubt if the death in the case in which Mr. Wells left it in took place in the way he supposed. The time was too short for the occurrence of sloughing and infection of the system. He preferred the sitting, or semi-recumbent posture, because it was convenient for the operator, and it rendered the escape of blood or serum from the cavities of the abdomen and pelvis easy. This was a matter of considerable importance. He trusted others would be led to adopt the operation. For himself he could say, that in the last few months he had done more good in ovarian cases than in the whole of his previous career. He could not before this have pointed to four distinct and positive cases of cure.

WESTERN MEDICAL AND SURGICAL SOCIETY.

Friday, February 1, 1861.

The President in the Chair.

Mr. Milner related some particulars of a case of

RODENT ULCER,

and exhibited a water-colour drawing of its present condition. It occurred to a woman, aged 58, who first came under his observation in April, 1859. It was then about two and a-half inches in diameter. Commencing in 1854 as a small warty growth on the right cheek, it fell out, leaving an ulcer, with

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hard edges, which gradually but slowly attained its present size and appearance. It now occupies the entire cheek, from the eye to the jaw, and from the nose to the middle of the ear, a portion of which it has destroyed. In depth, it does not extend beyond the integuments. The author then made some remarks upon the invariable characters of this disease,—the age at which it occurred, its position on the face, the little impairment of the health, its slow progress, the little pain or hæmorrhage which attends its progress, the odourless state of its secretion, its everted edges, and the unaffected state of the lymphatic glands. Offering some opinions as to the nature of the disease, Mr. Milner called attention to the great importance of recognising it at a time when the only treatment which had been found available in stopping its ravages, viz., its entire destruction by caustic or free removal by the knife, could be effectually carried out.

Mr. Barnes then related a case of

DISEASE OF THE BLADDER.

A gentleman came to him in June last complaining of a severe pain in the glans penis, from which he obtained relief by passing his water; but that the frequent recurrence of the pain, with the necessity of frequent micturition, rendered his condition very distressing. Not improving under treatment, the patient had obtained the assistance of several Practitioners in succession, who advised various remedies but without giving any permanent relief. Steel and sedatives were given, and injections into the urethra were used. In the month of October Mr. Barnes passed a catheter into the bladder with the view of exploring it, the patient having been made to pass all the water he could; when, to his surprise, he drew off a pint more urine. From this time the pain entirely ceased, only recurring when the urine was not drawn off within nine hours. The patient was taught to use the catheter, and has remained perfectly free from his previous discomforts. The urine, during the continuance of the complaint, remained quite free from mucus, but some albumen was detected in it about the end of August. The author thought this anomalous complaint arose from partial paralysis of the bladder, which accounted for its not being entirely emptied, but that the continual stream of urine passing prevented any stagnation of it and its consequent effect upon that viscus.

Mr. Barnes then gave a few particulars of a

CASE OF RETENTION OF URINE

which led to the sloughing of a considerable part of the mucous membrane of the bladder, a portion of which he exhibited to the Society. It occurred to a lady after her confinement, which had been of long duration from inefficient pains. No notice had been taken of the bladder until three days subsequent to the labour, when intense pain was complained of in the abdomen. The catheter drew off five pints of black and offensive urine. It was accompanied by an enormous quantity of mucus. The catheter was afterwards used every six hours, the urine always containing a quantity of mucus. A fortnight afterwards a membrane was found projecting from the urethra, which, when removed, was of very large size and consisted evidently of a considerable portion of the diseased mucous membrane of the bladder. The patient had recovered, with a limited power to retain the urine.

Mr. Marcet exhibited to the Society two dogs, the bearers of

GASTRIC FISTULÆ.

He had performed the operation on one animal in December, 1859, and on the other in October, 1860. He observed that the operation was frequently unsuccessful from want of care in the choice of a dog, a strong, young, and healthy animal being required, and that, moreover, it was important to operate shortly after the dog had taken a full meal. Puff-ball had been used in one case, and chloroform in the other. The operation was performed according to M. Bernard's plan, and his form of canula used. The importance of preventing the dog, by means of a muzzle, from biting the canula, after the operation, was insisted upon. It was stated that the presence of a fistula and a canula in a dog's stomach did not interfere in the least with the animal's health, and that it was fit in every respect for physiological researches. Dr. Marcet gave an account of the method he had employed for re-introducing the canula into the dog operated upon in December, 1859, as this canula had fallen out six months after the operation, on account of the internal plate of the instrument having become unsoldered. The method was suggested from Blondelet's operation for gastric fistula described in Brown-Séquard's *Journal de la Physiologie de l'Homme et des Animaux*. A piece of meat was tied to the end of a string and made to be swallowed by the dog; thus part of the string was carried into the stomach. A blunt hook being now introduced into this organ through the fistulous opening, the string was secured, a loop of it drawn out, and the part in connexion with the piece of meat was cut off, the meat and small piece of string adhering to it being allowed to digest. The two ends of the string now protruded, one through the mouth, the other through the fistula. To the oral extremity of the string the canula was fastened, and by pulling the other end the instrument was passed into the stomach, through the œsophagus, and subsequently placed in the fistulous opening. Dr. Marcet took advantage of the opportunity to show the Society that a neutral fat is converted into its corresponding fatty acid partly or entirely during the process of digestion,—a fact he had communicated to the Royal Society, and published by them in June, 1858. One of the dogs having about an hour previously been fed with perfectly fresh butter, on collecting some of the contents of the stomach, they were found to smell strongly of butyric acid.

LEGAL INTELLIGENCE.

SIBBALD *v.* GODFREY.

The plaintiff, a Surgeon, sued in the County Court at Liverpool, to recover £11 11s. for travelling expenses from the Isle of Man to Chester and back. The plaintiff was bound over to appear at the General Gaol Delivery at Chester, to give his evidence in a case where a prisoner had been committed for trial at the Assizes. The defendant was the attorney for the prisoner, and he sent a telegram to the Isle of Man, where the plaintiff had gone, stating that the trial would come off on the following Wednesday, and that the plaintiff would forfeit his recognisances if he did not come over from the island. The plaintiff accordingly returned to Liverpool, and at defendant's request went to Chester, but the prisoner was not tried in consequence of some mistake of the prosecutor. The Judge (J. K. Blair, Esq.) on nonsuiting Mr. Sibbald with costs, said that the plaintiff went to Chester on his own recognisances. He was bound over as a witness, and the defendant merely apprised him from time to time of the circumstances. The plaintiff was bound to be in Chester at the next General Gaol Delivery, and if he had not been there would have forfeited his recognisances. He had no claim against the defendant, and must therefore be nonsuited.

The foregoing shows a case of great hardship upon Professional men, who are frequently called to give evidence before Coroners and Justices, and are there bound over to attend at the next Assizes, where they must proceed, or incur the risk of forfeiting their recognisances. If the trial miscarries, the witness has no claim upon the prisoner's attorney, according to the above decision.

White Poplar, or American Aspen. — In the *Journal of Materia Medica* for October, Prof. C. A. Lee has an article upon the properties of the *populus tremuloides*. He says, "We have good reason for believing that its tonic properties are considerably superior to those of the salix, especially its antiperiodic power, and that there are few indigenous tonics superior to it in a certain class of cases, especially intermittents." . . . . "It meets all the indications of the simple bitters." . . . . "The resinous decoction of the buds of the *populus balsamifera* is collected in shells in Canada, and exported in considerable quantities to Europe, where it is in much repute as a diuretic and anti-scorbutic. There is scarcely any doubt but that this substance will yet be found to be a useful substitute for the balsam of copaiba and the liquid turpentines. Further experiments, also, with *populin* in intermittents are desirable; we believe it will prove successful in a majority of cases, equal, if not superior to salicine, and can be manufactured much cheaper."

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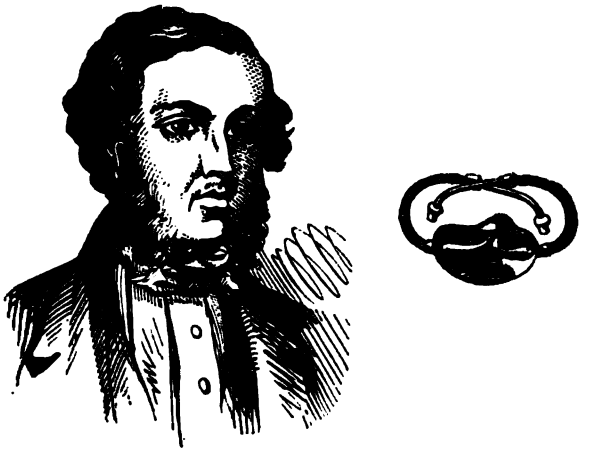
NEW INSTRUMENT.

INSTRUMENT FOR RELIEF OF DEAFNESS.

THIS instrument, which is called "The Patent Auricle," is constructed with a reservoir, of a paraboidal form, for collecting the sound, with the tubes conveying it to the ears having their orifice within the focus of the parabola.

Like the double stethoscope, the one sound is conveyed to both ears at the same time, whilst from its paraboidal form it collects the largest amount of sound within the smallest



area. By the engraving it will be seen that the instrument can be worn without any aid. When not in use, takes up a very small space.

It can be put on and taken off with the same readiness as a pair of spectacles; by ladies it may be worn under the bonnet, and rendered perfectly invisible.

We are told that it has been found very useful in several cases of deafness, and has been patented by Mr. Pratt, of Oxford-street, London.

MEDICAL NEWS.

APOTHECARIES' HALL.—The under-mentioned gentlemen passed their examination in the Science and Practice of Medicine, and received Certificates to Practise on Thursday the 7th inst.:—

Aldred, Henry, Manchester
Bennett, Charles
Hayward, George, Suffolk Militia Artillery
Harrison, Charles, Lincoln
Hooper, John Harward, Upton Warren, Worcester
Metcalfe, Richard, Hawes, Wensleydale, Yorkshire
Morris, Henry, Royal Berks Regiment of Militia
Neatby, Thomas, Barnsley, Yorkshire
Pater, William Thompson, East Kent Militia
Pennington, Abel, Warrington

The following gentleman also on the same day passed his First Examination:—

Ruttledge, William Frederick, London Hospital.

DEATHS.

ASHFORD.—January 26, at Broadclist, Devonshire, Giles Reynolds Ashford, L.S.A. Lond. aged 53.

BENTLEY.—February 2, at Hackney, Edward Bentley, M.D. St. Andrews; M.R.C.P. (exam); Consulting Physician to the Elizabeth Fry Refuge, formerly Physician to the City and Islington Dispensary and to the City of London Hospital for Diseases of the Chest, aged 43.

DENNY.—Recently, William Denny, M.R.C.S. Eng, Surgeon Major, Army.

FITZGERALD.—January 31, in Dublin, Gerald Fitzgerald, A.B., M.B., Surgeon R.N.

JACKSON.—Recently, James Jackson, M.R.C.S. Eng.; Surgeon 13th Foot.

LEY.—February 4, at Pickering, Yorkshire, Martin Augustine Ley, M.D., aged 86.

MORISON.—February 5, at Anchorfield, near Edinburgh, Alexander Cushine Morison, late Surgeon in H.M. Bengal N.I., son of Sir Alexander Morison, M.D.

NIHILL.—February 2, at Killaloe, Ireland, Daniel Nihill, M.D.

PALESON.—February 7, at Horseclose, Ruthwell, Dumfriesshire, Matthew Paleson, aged 36.

POTTER.—February 6, George James Potter, of Attleborough, Norfolk, L.S.A. Lond., aged 43.

ROBERTS.—February 7, at Bristol, William Fletcher Roberts, late of Moreton-in-the-Marsh, M.R.C.S. Eng.; L.S.A. Lond. aged 60.

ROBINSON.—February 6, Charles Robinson, of Altrincham, Cheshire, late of Runcorn, and formerly of Hipperholme, Yorkshire, M.R.C.S. Eng.; L.S.A. Lond., aged 63.

VAUDREY.—January 25, John Vaudrey, Holly Bank, Bredbury, near Stockport, Cheshire, L.R.C.S. Edin., aged 81.

WREFORD.—February 5, Samuel Wreford, of Ottery St. Mary, Honiton, Devonshire, M R.C.S. Eng., L.S.A. Lond., aged 65.

CHARING-CROSS HOSPITAL MEDICAL SOCIETY.—The following gentlemen were elected the office-bearers and Council of the Society, on Thursday evening, January 31:—President: Edgar A. Browne, Esq. Vice-President: Frank W. Cooper, Esq. Hon. Secs.: F. C. Skegg, Esq., and U. H. Cope, Esq. Council: Messrs. J. Dobson, W. Harvey, Davis, Mallam, and Hobson.

THE Homœopaths, unknown to themselves, I allow, have very opportunely taught us to recognise the power of the forces of the living economy. Their success, founded on cures which they arrogate to themselves, and which in fact belong to Nature, has been of great service to us, in teaching us to rely less on ourselves and more on the wonderful appliances of the tissues themselves, and of the apparatus which constitutes the animal machine.—*Trousseau.*

WHISKY IN TETANUS.—In the *Louisville Medical News* for September, 1860, Dr. A. B. Cook has an article upon the treatment of *tetanus*. He reports a case treated with whisky, in which the results were perfectly satisfactory. The usual treatment was pursued for a time with no improvement. Two ounces of whisky were then ordered to be given every two hours, and the symptoms abated, and in due time the patient recovered. Dr. Cook says: "From the evident good effects of the whisky in this case, I would administer it with more hope of success than any other remedy with the result of which I am at present acquainted."

ROYAL MEDICAL BEVENOLENT FUND SOCIETY OF IRELAND.—The seventeenth annual meeting of the Belfast branch of this Society was held on the 4th inst., and was very influentially attended. It should be observed that the Parent Society has now the prefix "Royal,"—Her Majesty, who, with the Prince Consort, presented a donation of £100 to the Society last year, having been pleased to grant leave for this privilege being conceded to it. Dr. Brown and Dr. R. Stewart were re-appointed Treasurer and Secretary respectively, and the warmest thanks of the meeting passed to them for their indefatigable services on behalf of the interests of the Society.

STRAMONIUM IN NEURALGIA.—In the *Chicago Medical Examiner* for October, Dr. A. Young says of neuralgia: "I have to meet with the first instance that has failed to yield to stramonium." "The mode in which I have given it in the intermittent form, is gr. j. of Tilden's ext. stramon. fol., every two or three hours during the intermission, until the system is decidedly affected, indicated by dilated pupil, disordered vision, vertigo, and often hallucinations, or mild delirium. When given to this extent, it will generally be found unnecessary to repeat it. Anything less than this will be of comparatively little value."

I HAVE long been inclined to think Medicine powerless in the treatment of acute pneumonia. I have long been tempted to leave to Nature the cure of this disease, against which we are all inclined to act so vigorously; but as yet I have not had the courage to do so. Antimonials, emetics, and digitalis are my favourite weapons, and I should feel that I was neglecting my duty if, convinced as I am, and perhaps erroneously so, of the great usefulness of these remedies, I should leave them aside, and let Nature alone cure the disease.—*Trousseau.*

PRESENT MEMBERS OF THE ACADÉMIE DES SCIENCES DE FRANCE.—At the present time this celebrated body consists of sixty-two members, distributed into the eleven sections of Geometry, Mechanics, Astronomy, Geography and Navigation, General Physics, Chemistry, Mineralogy, Botany, Rural Economy, Anatomy and Zoology, and Medicine and Surgery. M. Elie de Beaumont is the Secretary for the Mathematical Sciences, and M. Flourens for the Physical Sciences. We

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enumerate the names of the members of the tenth and eleventh sections only, as being those of most interest to our readers. There are in the Anatomical and Zoological Section MM. Isidore Geoffrey St. Hilaire, Milne-Edwards, Valenciennes, Coste, Quatrefages, and Longet. In the Medical and Surgical Section there MM. Serres, Andral, Velpeau, Claude-Bernard, Cloquet, and Jobert. Next we have ten Free Academicians, of whom M. Civiale is the only member of the Medical Profession. The Foreign Associates are eight in number, viz.—MM. Faraday, Tiedemann (just dead), Mitscherlich, Owen, and Ehrenberg, Baron Plana, Sir David Brewster, and Sir John Herschel—the English thus carrying off four of the eight of these valued scientific prizes. Lastly, there are ninety-three Corresponding Members, distributed over the before-mentioned eleven sections, twenty of these being our own countrymen. The following are the members of the Section of Medicine and Surgery, viz. MM. Maunoir, of Geneva; Panizza, of Pavia; Bretonneau, of Tours; Sédillot, of Strasbourg; Guyon, of Algeria, Virchow, of Berlin; Denis, of Toul; and Sir B. Brodie. M. Milne-Edwards is the President of the Academy for the present year, and M. Duhamel has been chosen as Vice-President.

BAD STATE OF PUBLIC HEALTH IN NEW YORK IN 1860.—The editor of the *American Medical Times* complains loudly of the defective sanitary arrangements of that City, conducted as they are by officials profoundly ingnorant of sanitary science. During the year 1860, when no epidemic (save one of scarlatina of no great severity) occurred, there were 22,710 deaths; being 1065 above those of 1859, and giving a percentage of 1 in 36 of the population. "This is the highest death-rate of any civilised city of the word, and equals that of many cities during the prevalence of cholera, and yellow fever, etc. The City Inspector casts about for some scapegoat for this alarming state of the public health, and is again obliged to bring forward the often-exploded fallacy, that this excessive mortality is principally due to emigration. Now, the simple truth is, that emigrants are a peculiarly healthy class of people, as is shown by the fact, that but 1·31 per cent. during the last ten years have died *in transitu*. Besides of those who arrive here, the Commissioners of Emigration state officially, that but about 3 per cent. remain in the city. Yet the City Inspector, without a shadow of foundation for the assertion, places it at 50 per cent! This miserable subterfuge will not serve his purpose any longer. He says that he does not know what the mortality of London is for the year 1860; but thinks it cannot differ much from that of New York. We can inform him that had the public health of New York equalled that of London in 1860, more than 2000 citizens now in their graves would have been living, and upwards of 52,000 cases of sickness would have been prevented. . . . . According to the Inspector's statement, the death-rate of a city must increase in a direct ratio with the increase of population. A more monstrous proposition was never made even by a New York official; and such a deliberately expressed opinion proves how utterly destitute of scientific information is the Health Department of New York. What are the facts? The death-rate of London 200 years ago, was 1 in 20 of the population. This year, with a population more than four times as great, its death-rate is reduced more than a-half, 1 in 46. No rational person doubts that if New York had the same efficient scientific health *surveillance* as London, her mortality returns would be reduced from year to year, however the population increased, until they reached a standard not greater than that of London."

THE HEALTHY CONDITION OF THE YEAR 1860.—The year 1860 will remain on record as one of those which has proved most favourable to the public health. The rate of mortality sensibly diminished throughout Europe, and Medical Practitioners have had an amount of leisure of which there are few examples. In England the number of deaths has been 20 or 25 below the mean, and in Germany and France the conditions have been no less favourable. For example, at Vienna but 1077 deaths occurred in August, 1860, while in the same month of 1859 there were 1532 (*i.e.* 495 in excess) registered. In some of the rural communes of France not a single death took place during the entire year! and in the Paris Hospitals there have been numbers of empty beds, the bulk of the patients who were admitted having also been the subjects of chronic affections. This remarkable immunity is well calculated to render us circumspect, and once more to exhibit how little we know concerning atmospheric influences. The year 1860, if we are to be guided by opinions which have their weight in science, united all the conditions which are supposed suited to engender disease. Rainy, unequal in temperature, and without its seasons distinctly marked, it ought, it would seem, to have given rise to the predominance of pulmonary catarrhs and gastro-intestinal affections. If things had so come to pass, and the Medical Constitution had become markedly affected, excellent reasons would have been at hand for the explanation of the occurrence of epidemics by the meteorological conditions which prevailed. Yet the epidemics have been rare, and the diseases usual to our climate, except mild and uncomplicated diphtheria, have been almost entirely absent. Since January, 1860, in a tolerably large Hospital Service, we have met with only six cases of sporadic typhoid fever. As a general rule, numerous acute cases occur at Paris as the autumn sets in, but 1860 has constituted a happy exception to this rule.—*Archives Générales*, Jan. 1861.

VITAL STATISTICS OF LONDON.

Week ending Saturday, February 9, 1861.

BIRTHS.

Births of Boys, 1067; Girls, 999; Total, 2066.
Average of 10 corresponding weeks, 1851–60, 1773·7.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	727	732	1459
Average of the ten years 1851–60	619·3	617·1	1236·4
Average corrected to increased population..	..	..	1401
Deaths of people above 90	..	..	7
Deaths in 15 General Hospitals	48	40	88

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1851.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	376,427	2	4	3	..	14	2	9
North ..	490,396	3	8	3	1	23	5	3
Central ..	393,256	..	8	7	2	15	4	..
East	485,522	4	6	7	3	17	8	4
South ..	616,635	1	4	3	1	12	7	4
Total.. ..	2,362,236	10	30	22	7	81	26	20

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·593 in.
Mean temperature	42·9
Highest point of thermometer	50·6
Lowest point of thermometer	32·5
Mean dew-point temperature	40·4
General direction of wind	S.W.
Whole amount of rain in the week	0·09 in.

BOOKS RECEIVED.

A Treatise on Fever. By R. D. Lyons, M.B., &c. London: 1861.
The History of Medicine. By E. Meryon, M.D. Vol. I. London: 1861.
Lectures on the Central Nervous System. By C. E. Brown-Séquard, M.D. London: 1860.
Fownes's Manual of Chemistry. Eighth Edition. London: 1861.
Adulterations Detected. By A. H. Hassall, M.D. Second Edition. London: 1861.
The Medical Missionary in China. By W. Lockhart, F.R.C.S. London: 1861.
Congenital Malformations of the Rectum and Anus. By W. Bodenhamer, M.D. New York: 1860.
Morel's Human Histology. New York: 1861.
Die Anatomie des Ohres. Von Dr. A. v. Troeltsch. Würzburg: 1861.
The Philosophy of Insanity. Edinburgh: 1860.
The Blind. By A. Mitchell. London: 1861.
Dairy Stock. By John Gamgee. Edinburgh: 1861.
On Asylums for the Insane. By W. D. Fairless, M.D. Edinburgh: 1861.
On Insufficiency of the Aortic Valves. By J. Cockle, M.D. London: 1861.
The Roman or Turkish Bath. By W. Potter. Manchester: 1860.
On Diseases Peculiar to Women. By H. L. Hodge, M.D. Philadelphia: 1860.

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TO CORRESPONDENTS.

Mr. Rumsey.—We do not remember having received the pamphlet alluded to as having been sent last October.

Mr. Foster.—Many thanks. Our correspondent has probably seen that his friend's character was justly appreciated.

A Crippled Old Soldier.—We know of no one who takes cases on the principle of "No cure no pay."

Mr. Skegg.—The notice of meeting of the Charing-cross Hospital Society arrived too late for insertion last week. Such notices should arrive at our office on the Wednesday before the day of publication.

BELLADONNA.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Your correspondent "W." will find in Rogers and Lee's edition of "Dr. Elliotson's Principles and Practice of Medicine," p. 422, that, "Belladonna" (fine lady) was so named from its employment by the Italian ladies as a cosmetic. I am, &c.

South Petherton, February 11. HUGH NORRIS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—A correspondent of yours ("W.") has enquired of you, "Why, when, and where Deadly Nightshade was first called Belladonna?"

Without being able to furnish a positive answer to his question, one may allude to a botanical fact which yields an approximate solution of the difficulty. There is a plant of the Narcissus tribe, growing in great profusion at the Cape of Good Hope and in the Island of Madeira, bearing the title of Belladonna Lily (Fair-Lady Lily), whose flowers are usually of a rich, blushing, rose colour. Their beauty and delicacy are supposed to assimilate so nearly to the maiden cheek of a beautiful woman, as to have procured for this amaryllidaceous plant the above flattering appellation. I do not think it is to be denied that although, generally speaking, the flowers of the *Atropa Belladonna* are of a "dingy brownish purple," they at times assume a more delicate and rosy appearance, not unlike that which has secured for the amaryllis the title of Belladonna Lily. Hence, botanists, in their anxiety to rescue the character of that abominably nauseous and dangerous plant the Deadly Nightshade, may have baptised it with the inviting name which belongs strictly to another order. Is not this so? In suggesting this solution, I wish rather to ask a question than furnish a dogmatic answer. I am, &c. EDGAR SHEPPARD, M.D.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In reply to the inquiry of "W." as to "Why, when, and where Deadly Nightshade was first called Belladonna," I beg to refer him to "Gerard's Historie of Plants," published in 1597. He will there read, "It is called of the Latines *Solanum Somniferum*, or Sleeping Nightshade; *Solanum Lethale*, or Deadly, and *Solanum Manicum*, or Raging Nightshade. In English, Owale, or Sleeping Nightshade. The Venetians and Italians call it *Bella Dona*" I must refer him for the "why" to a more modern writer. In "Hooper's Medical Dictionary" he will read, "From *Bella Donna*, Italian, a handsome lady: so called, because the ladies of Italy use it to take away the too-florid colour of their faces." I am, &c.

Farnham, February 11. ROBERT CLARK.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In reply to your correspondent "W."'s inquiries concerning the Deadly Nightshade, I beg to inform him that it is supposed by Mérat to have received the name of Belladonna from the circumstance that the Italian ladies at one time used the distilled water as a cosmetic for the complexion. I am not aware of any other author who mentions the subject. I am, &c. JAMES CLARK, M.B., L.R.C.S.E.

Burton-on-Trent, February 13.

NORTH LONDON HOSPITAL FOR CONSUMPTION.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I am ordered to inform you that a report of the origin and first three months' operations of this Charity is now in preparation, and will be forwarded to you as soon as it is printed. I am, &c.

J. A. HICKS, Secretary.

North London Hospital for Consumption,
2, Russell-place, February 13.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—My attention has been drawn to-day, for the first time, to a paragraph in the *Medical Times and Gazette* for February 2.

As you have printed a question I shall thank you to print a reply.

You ask, "What is the North London Hospital for Consumption?" It is a Special Hospital for Phthisis, situated, as nearly as possible, mid-way between the Brompton and Victoria-park Hospitals, and for sanitary reasons intended to be enlarged by additional branches in the North and North-West of London. Hence, "2, Russell-place," making up twenty beds, with a Matron, House-Surgeon, etc., is called the North-west Branch. The promoters, of whom I am proud to be one, intend to have "branches" a little way out of town to the north and to the west.

I was annoyed to see my name advertised, and have forbidden it to be repeated in future advertisements; but how an open defiance of homœopathy could have been made, at my instance, without stating distinctly the real challenger, I am unable to perceive.

Our institution has been in operation for three months, and our patients number between forty and fifty: I was elected its Physician in November 26, 1860, yet so distasteful to me is everything like puffing, that I have requested that my name should not be paraded on any of the prints of the charity, such as letters of admission, cards, and prospectuses.

I am, &c.

GODWIN TIMMS, M.D., M.R.C.P.,
Physician to the North London Hospital for Consumption.

22, Holles-street, Cavendish-square, February 8.

"THIRD-CLASS LICENTIATES."

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Would you be kind enough to give me a little information on the following questions:—Will the new Licentiates of the London College of Physicians be allowed to assume the title of Physician? Will his status, in a general Professional point of view, be equal to that of the Edinburgh and Dublin Licentiates? Is not the term "third class Licentiate" likely to lower the value of the degree given, they being eligible as competitors for Physicians' appointments, on the same par as other Licentiates of Colleges of Physicians?

As these questions affect the interests of many in the same position as myself, who are completely bewildered by the prospect of the coming revolution, an answer will greatly oblige

Camden-town, February 11. A DISAPPOINTED L.S.A.

MEDICAL ASSISTANTS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—A Preliminary Public Meeting of the Medical Assistants' Provident Society will be held on Tuesday evening, February 26, at seven o'clock, p.m., at 43, Lincoln's-inn-fields—the offices of the London and Provincial Medical Protection Society,—who have very kindly lent their rooms for the occasion. (Signed) M. H. IRVING, Secretary *pro tem.*

JUNIOR MEDICAL SOCIETY.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I beg to inform you that my efforts to establish a Junior Medical Society of London have so far succeeded that most of the Students' Societies have already formally agreed to join the General Association, and have elected their representatives in the General Council, which will hold its first meeting on Saturday, the 23rd inst.

Thanking you for the aid which you afforded the Society by giving publicity to the proceedings of the meeting which established it, and desiring also here to record my thanks to the various gentlemen who have assisted me in what has been rather an arduous undertaking,

I am, &c. ALEXANDER SQUIRE.

12, York-gate, Regent's-park, N.W., February 13.

COMMUNICATIONS have been received from:—

DIRECTOR GENERAL OF ARMY MEDICAL DEPARTMENT; M. CLAUDE BERNARD; Mr. LE GROS CLARK; Mr. WILDE, Dublin; Dr. ANDERSON, Glasgow; Dr. GRAILY HEWITT; Mr. FORSTER, Huntingdon; Dr. THOMSON; Dr. WILKS; Mr. HENRY SMITH; Mr. RUMSEY; ASSISTANT-SURGEON CHAPPLE; Mr. H. THOMPSON; Mr. GRIFFIN; Dr. SCHULHOF; Dr. D'ORSEY; Mr. HOLMES; Mr. COOPER; Dr. G. ROGERS; Dr. FAIRLESS; Dr. ANDREWS; REGISTRAR-GENERAL; Mr. STEVENS; Mr. HART; Mr. WALLIS; Dr. SLOAN; Mr. BATHURST; Mr. SQUIRE; Mr. WRIGHT; Mr. COMPTON; Mr. G. BROWN; Mr. SAGE; Dr. HODGE; Mr. GARDINER; REGISTRAR-GENERAL, Edinburgh; Dr. CLARK; Mr. LITTLEWOOD; Mr. POTTER; Mr. SINGLETON; Mr. J. FENN CLARK; Mr. WREDEN COOKE; Dr. FIGG; Dr. HILLIER; and Mr. HAMILTON.

APPOINTMENTS FOR THE WEEK.

February 16. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

ROYAL INSTITUTION, 3 p.m. Dr. E. Frankland "On Inorganic Chemistry."

18. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

MEDICAL SOCIETY OF LONDON, 8½ p.m. Dr. B. W. Richardson "On Life and certain of its Phenomena."

19. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Professor Owen "On Fishes."

ROYAL COLLEGE OF SURGEONS OF ENGLAND. Professor Savory "On the Physiology of Food."

20. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

ROYAL COLLEGE OF PHYSICIANS, 4 p.m. Dr. Brown-Séquard "On the Diagnostic Value and Modes of Production of the Various Symptoms of Diseases of the Brain."

21. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Professor Tyndall "On Electricity."

22. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

ROYAL COLLEGE OF PHYSICIANS, 4 p.m. Dr. Brown-Séquard "On the Diagnostic Value and Modes of Production of the Various Symptoms of Diseases of the Brain."

ROYAL INSTITUTION, 3 p.m. Professor Faraday "On Platinum."

EXPECTED OPERATIONS.

King's College Hospital.—The following Operation will be performed this day (Saturday) at 2 o'clock:—

By Mr. Fergusson—For Ruptured Perinæum.

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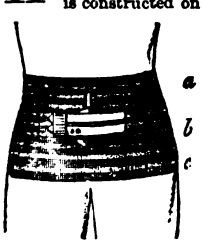

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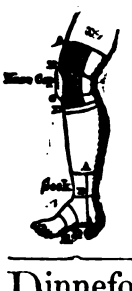

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ORIGINAL LECTURES.

LECTURES
ON
THE SPINAL CORD,
DELIVERED AT
The College of France,
DURING THE SUMMER SESSION 1860,

By M. CLAUDE BERNARD,
Member of the French Institute; Professor of General Physiology at the Faculty of Sciences, &c.

LECTURE VII.
ON THE PROPERTIES OF DIVIDED NERVES.
(*Continued.*)

Summary: Recapitulation of the Experiments which prove the Superior Excitability of Divided Nerves—Hypersæsthesia—Action of Galvanism—Medicaments and Poisons—Woorara—Application of these Views to Pathology—Medicinal Agents, when introduced into the System, are generally found to Direct their Action upon the Diseased Organs, preferably to all other Parts—The Reason of this Elective Affinity explained—The Influence of the Nerves upon Vascular Contraction explains this Fact, and others of a similar Nature—In what Manner the Tissues of the Lower Animals are capable of Acquiring, under given Conditions, the Properties which usually belong to Organisation of a higher Class, and *vice versâ*—Professor Pelikan's Researches on these Points—Various Experiments on the Effects of Poison in Cases where the Nerves have been divided.

GENTLEMEN,—We have just shown you that nerves, when separated from the centre on which they are implanted, suddenly acquire a degree of vital power, which, in the healthy condition, they were far from possessing. The demonstration of this fact, as regards the sensorial apparatus, rests entirely upon the acuteness of the animal's perceptions, as regards impressions of a painful nature: for the characteristic property of sensitive nerves consists in receiving and transmitting such impressions; but in the case of motor nerves, the physiological influence of which is exerted upon contractile tissues, we possess a variety of methods for ascertaining and even measuring, in a certain degree, the augmentation of this special power.

Galvanism is, in this respect, the chief agent employed; and the comparative method adopted by M. Dubois-Reymond in his experiments enables the physiologist to prove that currents not sufficiently intense to excite muscular contraction in the healthy state, enjoy this power when the nerve has been divided; so that the effect, which it is intended to produce, may be obtained either by increasing the amount of galvanic power employed, or by cutting the principal nerve, which animates one of the animal's limbs. Here, then, we possess a first and highly satisfactory mode of demonstration. But the existence of this property may also be substantiated by various other means.

In examining the action of the galvanic current upon sound nerves, we find that contractions are produced, in closing the circuit, but not in opening it; but after the operation has taken place, contractions occur in both cases. This experiment, as well as the preceding one, was performed in your presence the other day; and you must, therefore, be very fully convinced that all interruptions in the normal circulation of the nervous fluid produce a momentary accumulation of force in the diseased point. But as it is always highly desirable to multiply, as far as possible, the experimental demonstrations of a given fact, we will introduce you to an entirely different order of proofs, which specially deserve our attention, as being closely connected with the phenomena of disease.

The frog now placed before you, has been subjected to the same mutilation as in our former experiments; the sciatic nerve has been cut on one side; it becomes, therefore, more excitable when placed in contact with external stimuli; but (as we are going to prove) its excitability has also increased with reference to those of an internal nature;—in other words, its liability to both spontaneous and artificial disorders has also grown more considerable; and, as a consequence, both medicinal and toxic agents operate more powerfully upon it. For the demonstration of this property, which has already been alluded to, in the preceding Lecture, woorara is the fittest substance to be selected; and, by comparing the effects produced upon both sides, you will ascertain that the divided nerve has been disorganized (or has lost its physiological powers) with greater rapidity than the sound one,—that its resistance to the noxious influence of poison has been of shorter duration. But as nervous excitability, after the division of a nerve, increases in a direct ratio to the time elapsed, we have operated the subject a few moments before commencing the Lecture, in order to allow the effects to accumulate, as it were, in the paralysed limb.

The explanation of phenomena, which at first sight appear to contradict all our previous knowledge, opens, of course, a wide field for speculation; but the hypothesis which we will venture to suggest, is not without some foundation. We are obliged to admit, in such cases, that an elective affinity does really exist; but this circumstance entirely depends upon the change which occurs in the properties of the divided nerve, as opposed to those enjoyed in the healthy condition. Let us suppose, that in a given apparatus, nervous influence has been lessened or totally withdrawn: and let a substance which principally acts upon the nervous system, be then introduced into the vessels; it is evident that the nerves which belong to the diseased organ will be the first to suffer from the presence of this agent. Let us suppose, for instance, that a weak electric current passes through the body,—the only part affected, or at all events, that which is the most violently acted upon, will be that in which the leading nerves have been divided, as our experiments have fully exhibited a few days ago. If a vasomotor nerve, not a muscular one happens to have been injured, effects of a precisely similar nature will be produced, but in the vessels alone. For the same reason, if medicaments are administered to a sick person, their action will mainly be concentrated upon the organs which have become the seat of disease: an elective affinity for the disordered apparatus might then be supposed to exist; for the results of the Physician's interference will chiefly be perceived in that region. You will therefore understand without difficulty, how the inferior animals under the influence of a pathological state, are sometimes found to acquire properties which in the normal condition exclusively belong to the higher types of organisation, the reverse is, of course, equally true. In certain diseases, the muscular fibres of a batracian exhibit occasionally the same properties as in mammalia. If, therefore, we meet with modifications of such importance and extent as to overthrow the barriers between distinct species, we need not be startled at the changes which occur in the same individual, viewed in the opposite conditions of health and disease; in this manner organs previously insensible suddenly acquire an extraordinary degree of sensibility, and tissues scantily provided with vessels are all at once gorged with blood.

Our own experiments on the difference between sound and divided nerves have exclusively been performed upon batracians and dogs; but Professor Pelikan, of St. Petersburg, has repeated them with full success on large animals (horses, etc.). This property must, therefore, be considered as extending to all classes of animated beings.

We are now going to perform in your presence the experiments alluded to at the commencement of this Lecture. Here is the frog in which the sciatic nerve has been cut on one side. After poisoning it with a small dose of woorara, we will galvanise the nerves on either side, and it will be found that excitability disappears in the divided branch long before it ceases in the other; in the first case, the effects of woorara are almost instantaneous; in the second, a few minutes are required to paralyse the properties of the nerve.

[The sciatic nerve being laid bare on both sides, a weak solution of woorara is injected under the animal's skin: the nerves are then repeatedly galvanised; but their excitability disappears within an exceedingly short space of time, and is simultaneously found to be extinct on both sides.]

The experiment has failed, gentlemen; probably the dose of woorara was too strong; we will immediately repeat it on a fresh animal with a smaller quantity of this substance.

[The experiment is tried a second time with a similar result. M. Bernard attributes this failure to the summer heats, which accelerate the action of poisons in all animals; he promises to repeat the experiment on a future occasion.]

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ORIGINAL COMMUNICATIONS.

ON TRACHEOTOMY AND LARYNGOTOMY IN DIPHTHERIA.

By THOS. HILLIER, M.D. Lond.

Assistant-Physician to the Hospital for Sick Children, &c.

CASE OF DIPHTHERIA IN AN ADULT—LARYNGOTOMY—RECOVERY.

A Medical man, residing in the neighbourhood of Oxford-street, 45 years of age, had complained for several months of lassitude and debility. His wife states that his constant complaint, "I cannot long go on feeling so ill as I do," caused her considerable anxiety. For a few days previously to the end of March, 1860, he was more decidedly poorly, though the symptoms were ill-defined, and did not prevent his continuing to perform Professional duties. His general previous health had been tolerably good, although he was not a very robust man, and had on several occasions, when young, suffered from dangerous illness. He was subject to bronchitis, and his breath was habitually rather short. He had recently been attending a case of sore throat in an infant, believed to be diphtheritic, though false membrane was not seen. He had applied caustic to this child's throat several times, and some of the sputa had been coughed into his face. He was in attendance on this case from the 16th to the 28th of March.

On March 31st, soon after getting up, he was seized with a shivering fit which lasted nearly two hours; he looked and felt ill, and his countenance was haggard. The shivering was succeeded by heat of skin and a general feeling of illness and *malaise*. In spite of this, he went his usual round, although he says he had to "make a superhuman effort to go up and down stairs, to listen to patients, and a still greater one to speak to them." At 4 p.m. he came home and desired at once to go to bed, as he felt too ill to be up, refusing anything to eat or drink. At 7 o'clock he was seen by a Medical friend, who considered that he was suffering from severe catarrh or influenza. The following night was passed in a very restless manner; his skin was hot and dry. In the morning he complained of sore-throat. By the afternoon of April 1st there was more fever, and it was evident that his illness was about to be a serious one. There was diffused redness, somewhat eryaipelatous in character, over the pillars of the fauces and the back of the pharynx. At 10 p.m. breathing was difficult and somewhat laryngeal. He had taken half-a-grain of antimony at 9 o'clock. Twelve leeches were applied to the front of the neck, and an opiate given. Another Medical friend applied the leeches, and remained with him during the next night. At 1 a.m. the dyspnœa had rather increased than diminished. Two small blisters were applied to the throat.

The breathing continued to become more laboured, and the sense of dyspnœa so great, that he constantly begged that his trachea might be opened, as he was certain that the larynx was occluded by œdema of the glottis, or in some other way. Any attempts to swallow liquids occasioned severe paroxysms of suffocating cough. He himself wrote down (because from about 6 a.m. he could only speak in a whisper, and that with effort) that the epiglottis was rigid, and allowed fluids to flow into the larynx. On inspecting the throat at nine in the morning, a small patch of false membrane was detected on the lower part of the posterior areh of the palate, as if it had spread up from below. The rest of the throat was still very red. It was obvious that the case was one of diphtheria. During the night he had taken about three dessert spoonfuls of brandy, and four half-grain doses of antimony. At 11 o'clock a consultation was held. At this time the breathing was husky and laryngeal, the expression very anxious; there was some lividity of surface, and the pulse very weak. The patient urged strongly (by writing) his wish to have his trachea opened. He also expressed a strong desire to have chloroform. On consultation it was decided to give a small quantity of chloroform, and proceed to perform tracheotomy. After a few inhalations, lying on the couch in the position for the operation, his appearance became most alarming. His aspect was just that of one dying from asphyxia; he was quite insensible, his knees smote together, the hands and feet were blue, the teeth set, the nose and lips drawn, and the limbs were contracted. The pulse was imperceptible.

It was impossible to draw back the head so as to put the trachea on the stretch without increasing the dyspnœa; and, as it was quite obvious there was no time to be lost, a convulsive catching of the diaphragm being the only evidence of life, the Surgeon at once opened the larynx, and introduced a tube which admitted the air freely, and in a very short time the relief to the patient was very great. The pulse was in an instant perceptible. Consciousness soon returned, and the anxiety which the countenance had exhibited was replaced by calmness and composure.

Stimulants were given in small quantities every twenty minutes, generally sponge-cake soaked in brandy, wine, or a liqueur. He also had some cold turtle-soup. Fluids generally brought on a violent cough.

Towards evening he was much more comfortable, and slept for a few minutes at a time, generally waking from fits of coughing, which troubled him a good deal. The tube was kept in place by means of tapes round the neck; it did not get clogged up very much, but required occasionally to be mopped out with a feather or sponge.

The room was ordered to be kept up to the temperature of 65°, and steam was allowed to escape freely by means of the form of steamer contrived by the late Mr. Pretty.

April 3.—During the night he slept for very short periods at intervals; the cough at times was paroxysmal, and very distressing; it was induced by nearly every act of swallowing fluids, and sometimes came on spontaneously. He constantly cried out for more air. He found relief by frequently rinsing and gargling his mouth with a dilute solution of Condy's fluid. During the day he took seven ounces of wine and three ounces of brandy, as well as four ounces of milk, four ounces of beef-tea, and an egg. He was tempted to take stimulants and light nourishment as frequently as possible, but there was a great aversion to nourishment; and stimulants felt hot and burning to the throat, besides making him cough. He also had twenty-five minims of the tincture of the sesquichloride of iron in water every four hours.

At half-past five p.m., at his very earnest request, he was allowed to take a quarter of a-grain of morphia. The bowels had acted half-an-hour previously, and had given rise to prolapsus ani, from which he had occasionally suffered for some years past. At 10 p.m. an opiate enema was administered, to relieve the symptoms as well as the tenesmus which accompanied it. He was ordered liq. morph. acet. ♏x.; sp. æther sulph. co., ♏xv.; aquæ ad. ℥j. 8vis hôris.

April 4.—During the night he slept once for an hour, and several times for ten minutes, but was restless, and complained a good deal of wanting air. He begged very much to have more opiates given to him. At 6 a.m. the bowels were moved, and about an ounce of water and blood passed from the prolapsed bowel. Another starch enema with fifteen minims of tincture of opium was administered. At 8 a.m. his pulse was 120, weak, but regular. Respirations 42 in the minute. The urine was examined and found to have a sp. gr. of 1026, and to be distinctly albuminous. During the night he had taken four eggs, seven ounces of milk, and four ounces of spirit. At noon he again passed water, and appeared about the same as on the previous day, but rather weaker. At 1·30 p.m. he took his sedative draught, and dozed for an hour. At 5 o'clock he begged so earnestly to be allowed some more opiate, that his nurse was prevailed on to give him another dose of the morphia and Hoffman's anodyne. At 6 o'clock when taking some sponge-cake and wine, the choking spasmodic cough was more severe than it had been at all. At 8 p.m. very soundly asleep, snoring. Skin copiously perspiring. Pulse 144, weak. At 9 p.m. he wrote on paper some incoherent sentences. At 10 p.m. his Medical attendants thought that he was dying; the pulse was intermitting and very rapid; his countenance of a very dusky tint; his hands and feet, which had been since the night of April 1 rather livid, were now more so. There was mucous *râle* in his throat. He lay in a semi-comatose state, capable, however, of being roused, but delirious until a quarter to 3 a.m. of April 5th, when his pulse was regular, but very weak, 120. The skin of his hands was then cool and clammy; his breathing tolerably comfortable; he was still drowsy. At 3 a.m. he was roused, and persuaded to swallow

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some sponge-cake saturated with rum. This caused a fit of coughing and great discomfort, so that he refused to attempt to swallow anything else at present. The pulse had again become intermitting and excessively weak. I then, by his own desire, introduced the stomach-pump tube into his stomach, with the intention of injecting some beef tea and brandy. It passed readily, but caused him so much feeling of distension and burning in the gullet, that he could not tolerate it. He said, or rather wrote, that he was sure there was something wrong in the œsophagus. I now determined to give him a nutritive and stimulant enema, consisting of beef-tea fourteen ounces, brandy one ounce and a-half, and tincture of opium fifteen minims. This was retained, and appeared to produce a very marked improvement. The pulse became much less frequent, regular, and fuller. He asked now for a change of linen, which was given him. At 4 a.m. he had a quarter of a grain of morphia, after which he slept for half-an-hour, and awoke asking for water acidulated with citric acid, to wash his mouth with; and for some cold jelly. He always found iced things most pleasant to his throat; and for the past two days had very frequently gargled his mouth with iced water, iced alum water, and iced diluted Condy's fluid. At 6 a.m. could not pass water. At his request I introduced the catheter and drew off about 3 oz. of high-coloured urine. At twenty minutes to nine he passed 5 oz. of light-coloured urine unaided. During the day brandy was administered at frequent intervals, but not so often as was ordered, owing to the paroxysms of cough. At half-past 10 a.m. a second nutritive enema was passed. At half-past 1 p.m. his bowels acted, the motion consisting in part of fæculent matter, and part of the injected fluid. During the day he took ¼ gr. of morphia twice. At 5 p.m. passed 4 oz. of urine, specific gravity 1022, high-coloured, with a small quantity of albumen. At 6 p.m. he began to be again delirious, writing nonsense on slips of paper which he made signs to obtain. At quarter to eight another nutritive enema of beef-tea and brandy was given. Still wandering at quarter to nine; drank a glass of port wine. At 11 p.m. he had slept at intervals, and appeared to be rational. The tube had become slightly clogged, and was now cleared out; the discharge from the throat was not offensive; the edges of the wound were red and very tender. At midnight the urine required to be drawn off by catheter, 5 oz. of healthy colour.

April 6.—At 1 a.m. the nutritive enema was repeated. Slight delirium during the night. At 6 a.m. 8 oz. of dark coloured urine passed unaided, slightly albuminous, 1020 specific gravity. At 8 a.m. pulse slighly irregular, occasionally intermitting. After this there was administered an enema of beef-tea and brandy, which decidedly improved the pulse. A mixture was ordered as follows:—Tinct. quinæ ʒij., ammon. carb. gr. vj., mist. amygdalæ ʒj., 4tis hôris sumend. At noon the wound was dressed, and the tube taken out; it was found that breathing went on as comfortably without as with it. Another tube was introduced and the edges of the wounds which looked irritable were dressed with a nitric acid and opium lotion. Once or twice during the day he felt very faint, but was revived by stimulants swallowed and taken as enemata. Chlorate of potash lozenges were given him to suck frequently.

7th.—Had passed a very restless night, spite of his opiate. Towards morning complained of want of air; the dyspnœa was in some measure paroxysmal, but constantly present more or less; found some relief from inhaling steam. At half-past six a.m.—Pulse 130, soft and regular. The base of the lungs were examined, and found to be the seat of mucous *râles*. In the afternoon the tube was removed, and the wound dressed with water-dressing so as to cover up the opening; this did not increase the dyspnœa. At half-past four he asked for tea, an egg, and bread-and-butter, and appeared more composed and comfortable than he had done since Sunday, April 1. Towards evening there was again retention of urine, relieved by the catheter.

8th.—Had slept tolerably till about four a.m., having wandered a little in the earlier part of the night. At four o'clock was faint; pulse very weak, so that another nutrient and stimulant enema was administered with obvious benefit. Six a.m.—Complains of tightness in his throat; the cough has been very irritable; says he shall die if he cannot raise the phlegm. A mustard plaster applied to sternum. At eight o'clock, cough and dyspnœa very distressing. At his request I attempted to re-introduce the tube into his larynx, but desisted on account of its occasioning him much pain and coughing; suffers a good deal from flatus, which is relieved, as is also the dyspnœa, by an enema consisting of one pint and a-half of gruel and half-an-ounce of tincture of assafœtida. Urine passed in twenty-four hours, measured thirty-two ounces, specific gravity 1023, with less albumen. Half-past nine a.m.—Throat was examined and found to exhibit less diffused redness; a small white deposit visible on the epiglottis, which was reddened and thickened; this was touched with the solid nitrate of silver. To take ammon. carb. gr. iij., liq. cinchonæ ♏ x., spir. æther sulph. co. ♏ xxx., ex aqua, 6tis quaque hôra. In the afternoon got out on to the sofa to have his bed made. Pulse has fallen to below 100, and is fuller; flatus relieved by another assafœtida enema; catheter had to be passed twice in the evening, once he passed it for himself. At twenty minutes past eight p.m. pulse had again become intermitting, and he complained much of weakness, tightness in his throat, and dyspnœa. The dressing removed from wound. An enema of beef-tea 6 oz., port wine 3 oz., brandy 1 oz., and tincture of opium, 20 minims, administered with apparent relief. Pulse again quite regular.

9th.—Towards 3 a.m. pulse again became intermitting,—relieved by brandy and jelly. Feels better and looks better this morning; is more cheerful. No deposit to be seen on throat; still a good deal of redness, but less than yesterday. Pulse under 100, soft, moderately full, and regular. Had some boiled fowl and asparagus for dinner, which he appeared to relish. In the afternoon a warm stomachic draught, containing aromatic confection and tincture of rhubarb, was ordered to be taken as occasion required.

10th.—During the night the cough was troublesome. He complains that he cannot swallow liquids, but he certainly can swallow them better than he could two days ago. Moist rhonchi heard at bases of both lungs. Urine passed this morning strongly acid, free from albumen. In the afternoon suffered again from retention of urine; there was apparently some spasm in the urethra, so that there was a little difficulty in introducing the catheter. Cough was very troublesome towards evening.

11th.—Slept five or six hours consecutively with the help of laudanum. Complains of soreness of throat; cough is better. Urine high-coloured,—non-albuminous. Read the *Times* in the afternoon; during a fit of coughing a piece of slough was drawn from the wound into the larynx, and expelled by the mouth. Had mutton and seakale for dinner. Towards night much more comfortable.

12th.—Pulse when sitting, 96; when lying, under 90; respiration, 22. Cough better; epiglottis less swollen and paler; no false membrane visible in throat. During the past week he had been taking stimulants in large quantities, which were now being reduced (one or two days he took more than a pint and a-half of spirit in the twenty-four hours). He still takes small doses of morphia every five hours. From this time he slowly improved, and regained strength, the only drawback being that his stomach and liver became deranged, but were soon put in order by a small dose of calomel and castor-oil. A few days later he went into the next room.

On April 29 he went out for a drive.

On May 1 he went to Hastings. After being there a week he caught cold from walking in a cold wind after taking a warm bath. He was troubled with a little inflammation of the fauces and slight bronchitis, but this was relieved by simple means in a few days.

On June 23 he again resumed practice, not having quite regained his strength, although he had gained much flesh. His voice was still husky and incapable of being raised to loud speaking. Occasionally in swallowing there was some pain; it was chiefly confined to one spot on the right side of his neck; it was a kind of soreness, as if there was ulceration at this point. Nothing amiss could be discovered by careful exploration of throat.

About six weeks later than this he coughed up without any difficulty a small flake of bone. A week afterwards he was seized whilst at tea with a severe paroxysm of suffocating cough, which lasted several minutes, and made him quite livid. At the end of this fit another piece of bone larger than the first was brought up. It was evidently true bone which had undergone necrosis. The part from which it came is not very clear.

A few days after this the soreness which he had suffered

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in the right side of the neck was much diminished. Since that time his health has continued tolerably good; his voice has not yet entirely recovered itself; he sometimes felt a soreness and aching on the left side of his neck, as if there might be another fragment of bone getting detached on that side, or some point of ulceration there. This soreness gradually disappeared.

Remarks.—This case presents several features of great interest. The occurrence of such a severe attack of diphtheria in an adult, the mode of its onset with a decided rigor, its commencement in the larynx and pharynx, and the false membrane gradually spreading upwards so that it was not visible on the fauces until the dyspnœa and dysphagia were already most alarming, are all of them circumstances not by any means very common. In reference to the treatment there are two things which appear to my mind to have saved the life of the patient; in the first instance the operation of opening the air-passages at a time when he was obviously moribund, and subsequently the use of stimulant and nutrient enemata at a time when the patient could take no support by the mouth without occasioning the greatest distress. Although tracheotomy was intended, laryngotomy was performed from the circumstances I have mentioned above, and is probably, as a general rule, quite as likely to be successful as tracheotomy. If the disease has extended below the rima glottidis, it will most probably extend down the trachea, whether the crico-thyroid membrane or the trachea itself be opened; whereas if the disease is limited below by the true vocal cords, which appear generally for a time to present some impediment to the downward progress of such diseases, the existence of a wound in the crico-thyroid membrane does not appear to encourage its spread downwards. The employment of nutrient and stimulant enemata turned the scale, I believe, at a later period; several times when the pulse was flagging and the patient appeared likely to go off by syncope, the injection of beef-tea and brandy was of very marked benefit. In another case I should be inclined to give smaller quantities at a time and to give them more frequently. There were two points in this case unfavourable to the unlimited use of enemata for purposes of stimulation and nutrition, namely, that the patient almost constantly suffered when in health from flatulence, and had frequently been the subject of prolapsus ani. If these enemata be administered incautiously they may bring on diarrhœa, an event much to be dreaded in so depressing a disease as diphtheria.

In children suffering from diphtheria, there is generally a great repugnance to taking stimulants or nourishment, and it is generally impossible to get them to take enough by the mouth to keep them alive. I believe that stimulants and nourishment might be given per anum with great advantage, much more frequently than they are.

One element in the treatment of this case is peculiar, namely, the free use of morphia and opium. This arose, not from the judgment of those in attendance, but owing to the constant earnest solicitation of the patient himself. On one occasion it certainly appeared to produce alarming symptoms, although it is by no means clear how far these symptoms depended on opium, and how far on the natural progress of the disease, which must, I think, be assumed not to have reached the crisis until the morning of April 5, the sixth day from the rigor. The sleep obtained at this time seemed, however, to calm the patient, and to relieve some of the spasmodic symptoms, and although he woke up in a very weak state, yet from this time, by means of free stimulation, he appeared to improve rapidly. A good deal of the distress from want of air in these cases, arises, not from mechanical obstruction, but from spasm in the muscles of the larynx, induced paroxysmally by the disease. The opium is very likely to relieve this spasm; but it may do harm by arresting the biliary and other secretions of the alimentary canal, and by causing dyspepsia. The spasm might, perhaps, be relieved with less risk by such drugs as belladonna, compound spirit of sulphuric ether, or assafœtida and valerian. In some cases an emetic might be resorted to with benefit. The enemata containing assafœtida appeared, in this case, frequently to relieve dyspnœa quite independently of relieving flatus, and before flatus was expelled.

With reference to local applications, if the margins of the false membranes can be reached, I believe that caustic, especially hydrochloric acid, should be applied around the edges of the false membrane, to the parts not yet invaded; but if they cannot be reached, I do not think any benefit will be derived from the use of cautics. Condy's solution, diluted in the proportion of about two drachms to half-a-pint, as a strong oxygenator, may be advantageously used as a gargle; chlorate of potash, made up into lozenges, five grains in each, suggested by Dr. Part, appears likely to be useful.

DIPHTHERIA IN A CHILD—TRACHEOTOMY—DEATH.

On May 17 I was called to see a little girl aged 2 years, living in a street leading out of Tottenham Court-road. She had been attended for several days previously by another Medical man, Mr. S., who had seen her half-an-hour previously and told the parents that the child was suffering from diphtheria, and that there was no hope of her recovery. I ascertained subsequently from this gentleman that he had seen her about a week before, when the child seemed to be suffering from a bilious attack, having lost her appetite and appearing generally out of sorts. Up to that time the child had enjoyed good health; she was a plump, clear-complexioned, very intelligent little girl. It was not until the 16th that Mr. S. was led by the symptoms to examine the throat; he found that there was mischief going on there, and said that there was "ulceration which might lead to diphtheria." From the commencement of the illness the child had shown a great aversion to food, but it was not observed that there was decided difficulty in swallowing. Towards the evening of the 16th, the breathing became laboured, the child grew very restless, and had paroxysms of dyspnœa, which caused great lividity of face while they were present. She also had a cough somewhat of a croupy character. She slept scarcely at all during this night.

When I first saw her, I found her breathing with a stridulous noise; there was evidently obstruction to the entry of air at the orifice of the larynx. The neck was a good deal swollen; the front of it was infiltrated, and had a boggy feel; the pulse was very quick, of moderate power; the skin was warm, with a little moisture on it. Tint of face was pale at times, and at others flushed with a tint of lividity. On examining the throat, I found a distinct white deposit on the soft palate and pillars of the fauces; but I could not very accurately define its extent on account of the restlessness of the child. She would sip milk when it was offered to her, without pain, but not with relish. There was great restless and irritability, and at intervals extreme jactitation. I advised laryngotomy, as the parents were extremely anxious to have anything done which gave the shadow of a chance of the child's recovery. I told them I thought there was not the slightest chance of it if this plan were not adopted, and but a very faint one under any circumstances. At 7 o'clock p.m. the respiration had become somewhat increasingly difficult; Mr. T. proceeded to perform the operation of opening the air-passages. The crico-thyroid membrane was first opened, but it was found impossible to introduce a tube through it, so that Mr. T. opened the trachea. The operation lasted altogether about half-an-hour. There was a little loss of blood, some of which trickled down into the trachea.

The child was very faint after the operation, and somewhat livid. An enema was given containing wine, and in the course of an hour the child rallied. She coughed up a quantity of tenacious mucus, and the breathing became more easy till towards 4 a.m., when the tube was evidently getting occluded, and the dyspnœa became again very distressing. This went on increasing until 9 a.m. During this time the patient was at intervals somewhat convulsed, and extremely restless and irritable. During the night she swallowed with ease a fair quantity of egg and wine, and some beef-tea, more than she had taken during the previous week. She also had some beef-tea administered per anum. The pulse continued weak, about 120 to 130 in the minute. At half-past nine a.m. the tube was taken out, and found to have its cavity nearly half obliterated by means of a tenacious lining of dried mucus. A double concentric tube was now inserted, and the relief to the child was very manifest and complete. She now freely coughed up some viscid mucus. Nourishment was ordered to be given her every half-hour if she was awake, and every two hours if she slept. Towards evening the breathing again became more difficult, although the tube was kept well cleared out. As night advanced the paroxysms of

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dyspnœa were very trying; there were occasional convulsive attacks. She became gradually weaker, and died at nine o'clock on the morning of the 19th.

We could not obtain the consent of the friends to make a post-mortem examination.

There is no doubt that the diphtheritic deposit in this case spread downwards into the trachea below the wound, thus rendering the artificial opening nugatory. Tracheotomy or laryngotomy can scarcely be expected to do much good in diphtheria, especially of children, unless it be performed at an early period, immediately that the respiration becomes at all impeded, and before the patient has been suffering from the defective aëration of his blood. Even in this case, so much is the disease disposed to spread, that the benefit to be derived from the operation is very problematical, even more so than in the case of croup. Still, in a case where the progress of the disease is not very rapid, I should be disposed to recommend the operation immediately that there are signs of the larynx being attacked, and thus the throat being comparatively set at rest, and breathing being free, there is time to give the patient nourishment, stimulants, and medicine, which may enable him to withstand the depressing influence of the disease. I do not think local applications will be of any use unless they can be applied, as I said before, round the margins of the false membrane to the parts not yet attacked.

A third case of diphtheria in a child has come to my knowledge within the last day or two, where tracheotomy was performed. The child, a girl, was 3 years of age, admitted to University College Hospital on November 15, from Southampton-mews, Euston-road.

I have not been able to obtain details of the case beyond the following facts: that the child had been poorly for three or four days before admission, having no appetite, no decided fever, or thirst. On admission it was found that the tonsils and soft palate were coated with a greyish membrane, and there was some slight laryngeal character in the respiration; no cough. The symptoms became aggravated during the night, and in the morning dyspnœa and prostration were extreme. Tracheotomy was then resolved on: great relief was derived from the artificial opening into the trachea. The child rallied very greatly, and appeared to be progressing favourably, when (about six hours after the operation) she suddenly died.

On post-mortem examination the false membrane was found to cover the tonsils, soft palate, the posterior wall of the pharynx, the larynx, and the upper part of the trachea, nearly down to its bifurcation.

This mode of sudden death, apparently by syncope, is not uncommon in diphtheria, and is an additional reason for the free use of stimulants and nutriment, if possible by the mouth, but if not, by the anus.

P.S.—Since writing this paper, two other cases of diphtheria in children, in which tracheotomy was performed, have come under my notice, but death ensued in both instances at the end of a few days.

ON A NEW AND UNIFORM GAUGE FOR CATHETERS.

By HENRY SMITH, F.R.C.S.
Surgeon to the Westminster General Dispensary.

In a paper which I lately read before the Medical Society of London, relating to the treatment of stricture of the urethra, I referred to the importance of carrying on dilatation of the canal slowly and gradually so that as little disturbance as possible should be produced either in the part operated on, or in the system generally. I also stated that this gradual dilatation would be less liable to be followed by the return of a stricture than if any of the severe methods now often adopted were put in force, but that this kind of dilatation could not be effected in the manner it ought to be, by the instruments generally found in the hands of Surgeons, in consequence of the gauges, according to which they were constructed not being sufficiently minute in their increments, and there being no real uniformity in the scale.

My attention has long been directed to this point, and it has appeared to me most desirable that the differences in size between our catheters should be more minute than they are, and that the increase should be uniform. My friend Mr. Bishop was kind enough to assist me in this matter, and after having carefully examined a gauge according to which catheters are usually made in London, pronounced it to be both "variable and arbitrary" as regards differences in size. It was proposed that in the new gauge the increments should be exactly the one-hundredth part of an inch throughout the entire scale, being very much less than in that examined; but on calculation it was found that if the unit (or No. 1) catheter were to be, as I proposed, much about the same size as that now in use, twenty or more instruments would be required before a size equal to an ordinary No. 12 could be reached. It was then proposed that the increments should be the seventy-fifth part of an inch in the scale throughout. Mr. Matthews, of Portugal-street, has made a gauge accordingly, and has constructed for me a new set of catheters, the increase in size being exactly the seventy-fifth part of an inch from No. 1 to No. 15 in each instrument. My No. 15 is about equal in size to the ordinary No. 12, therefore in the set there is an addition of only three numbers. According to this plan, the increase in size in each catheter is not only minute and exact, but it is regular throughout the series, the great desideratum hitherto wanting. Consequently dilatation can be carried on in a mathematically gradual manner,—so slowly, so painlessly, and yet so effectually, that the advantages attending this mode of proceeding must be obvious to all who reflect on the sensitive nature of the urethral canal, and appreciate the difficulty which exists in getting rid of the thickening of a permanent stricture by ordinary dilatation.

All practical Surgeons who have had much to do with severe cases of stricture, have found that an instance is not unfrequently met with where a No. 2 or 3 catheter can be introduced; but where no progress can be made beyond one or two sizes; a No. 4 or 5 is arrived at, then the dilatation is stopped; either caustics, cutting, or forcible ramming down of instruments are employed; or it is only after a lapse of some time, and after the painful introduction of the last-sized catheter, on many occasions, that a larger instrument can be put into the bladder. This difficulty is accounted for by the fact of the increments in the old gauges being, as Mr. Bishop says, "variable and arbitrary," and also by a circumstance not hitherto, so far as I am aware of, sufficiently appreciated by Surgeons, viz. that in these more severe strictures the urethral canal loses its capacity for dilatation in proportion as it is dilated. It is too often supposed that because a No. 5 or 6 catheter can be passed through a stricture, it must of necessity follow that the diseased canal can be dilated to its normal state as readily as it has been dilated so far. This is a great mistake; and it will in truth be found that the further dilatation will be a most difficult task, in some cases an impossibility. This is owing, in a measure, not only to the incapacity of the canal to dilate, but also in a great degree to the arbitrary and abrupt increase in size in the catheters as ordinarily used, especially in the higher numbers. A great deal of this difficulty will be done away with by using instruments constructed according to the scale proposed in this notice, the increments in which are minute and uniform. I find great advantages in the use of these instruments, and I would strongly recommend all those Surgeons who are about to have catheters made, to get them constructed strictly according to the gauge now used by Mr. Matthews.

Caroline-street, Bedford-square.

VESICO-VAGINAL FISTULA.—In the *Nashville Journal of Medicine and Surgery* for October, Dr. W. T. Briggs reports a case of vesico-vaginal fistula of considerable size, which was cured by operative procedure. Two operations were necessary to effect a cure. He says, "After full consultation with Professors Eve, Bowling and Watson, I determined to leave the cervix uteri in the opening as it was, and to attempt to unite the vaginal with the uterine lip of the fistula, thus throwing the os uteri into the cavity of the bladder." After her recovery the patient menstruated entirely through the bladder. Dr. Briggs says, the greatest difficulty which he experienced in this, as in all similar operations, was in passing the sutures.

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REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

CONDUCTED BY
JONATHAN HUTCHINSON,
Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital,
AND BY
J. HUGHLINGS JACKSON, M.D.

CASES OF ABSCESS IN THE BRAIN.

We have from time to time recorded many cases of abscess of the brain; to these we now add the details of seven others, most of which have occurred recently in the various Hospitals. There appear to be recognised three ways in which abscesses of the brain are produced,—cases in which it follows on disease of the bones of the cranium; cases in which it follows occlusion of one of the large arteries supplying the brain; and a third class, of which we give an instance, in which the abscess appears to be similar to a pyæmic abscess elsewhere, as, for instance, in the liver. In the first class of cases the temporal is most frequently the bone affected, generally the petrous or mastoid portion; but, as was long ago pointed out by Pott, cerebral abscesses not unfrequently follow on disease of any of the bones from injuries to the head. We will give first two cases in which abscesses followed such injuries.

GUY'S HOSPITAL.

(Under the care of Mr. COCK.)
[Reported by Mr. MARTIN.]

Joseph G., aged 46, a fine, strong, healthy-looking man, was brought into this Hospital on the night of November 17, in a state of insensibility, having met with a very severe accident, viz. a compound fracture of the cranium, running horizontally across the squamous portion of the right temporal bone, without any depression, the wound was extensive, the greater portion of the temporal muscles being torn away, and the ear almost completely severed from the head. He had also a compound fractured jaw near the symphysis of the right side. Likewise another scalp wound behind the left ear. Having dressed all his wounds and put up the jaw in the usual manner, he was left for the night. In the morning he was found perfectly sensible, so far so, at least, as to be able to give an account of the manner in which he had met with his misfortune, and of his former history. He said that he was a single man, of very temperate habits, had always enjoyed good health, by trade (or calling) he was a waggoner, and that on the previous day, while driving his team home, he went to sleep, and fell off his box, and got jammed between the wheel and the curb of the pavement.

He now complained of great pain in his head, but in no one particular spot. On examining his eyes, it was noticed that the right pupil was very much dilated, and that he had almost entirely lost his sight. He also drew attention to his shoulder and arm (of the left side), which appeared to be partially paralysed as if from a severe blow.

November 20.—The pain in his head not so severe. Pulse good, and his bowels open. The sight of the right eye quite returned. The wounds all looking healthy. Moulded a gutta-percha splint for the jaw. The arm better.

28th.—Going on very well. Obliged to remove the splint from its collecting the discharge from the wounds. His appetite very good. Rather more pain in his head.

December 3.—Still doing favourably. Wounds all healing rapidly. Pain in his head still continues.

7th.—The pain in the front part of his head very acute.

10th.—Had a fit of an epileptiform character.

12th.—Still complains of his head, otherwise progressing most favourably.

17th.—About 11 a.m., was suddenly seized with a convulsive fit, and became totally insensible, the convulsions continued unremittingly throughout the day with each respiration, in this state he lingered on till the following morning, when he died, at 8 a.m.

Autopsy.—The scalp was removed over the right temple, but the wound was quite healthy. Bone beneath, white. On removing the scalp, and carefully examining the cranium, no fracture was discoverable, but a circular dent as though the bone had been grazed against some hard substance, this was just below the squamous suture, not far from the meningeal artery. No blood was effused either external to the dura mater, from their vessels nor any within. The bone within corresponding to the injured part, was adherent to the dura mater by a circumscribed circular patch about the size of a fourpenny-piece, and a drop of pus existed between them. The bone when this was removed, felt slightly rough, and no doubt was in an early stage of caries. At the same spot, the dura mater was adherent to the brain, that is on the outer side, and upper part of the right anterior lobe. On tearing off the dura mater a green spot was seen on the brain, having a pin-hole aperture in it. On removing the brain the hole became larger, and pus exuded from it. There was no arachnitis around this spot, nor in any part of the brain which was visible when the calvaria was removed, but the base was covered with a quantity of lymph. This was not at all connected with the diseased spot on the surface. On making a horizontal section through this place, an abscess was opened about the size of a walnut, circumscribed and of a fetid smell. It continued inwards towards the ventricle, into which it had burst. The circumscribed older part had given way internally, and thus the rupture into the right ventricle at its upper and anterior part. The lateral ventricles were thus filled with a green or dirty-coloured purulent matter, and their walls were soft. The same also in the third ventricle, and so on to the fourth ventricle which was filled with pus. From this it extended to the base, and thus the subarachnoid space was occupied by a greenish lymph in large quantities, covering the optic commissures, cerebellum, etc. It was quite circumscribed above, however, as before mentioned, but extending up so high as the wound, and, therefore, evidently set up by the communication with the abscess through the ventricle. This same condition, lymph beneath the arachnoid, extended down the canal: this, therefore, was opened in the back, and extensive arachnitis was found. On removing the sheath, the subarachnoid space was found quite occupied by firm, green, inflammatory lymph. From the quantity present, it no doubt extended to the end of the cord.

YORK DISPENSARY.

SLIGHT INJURY TO THE HEAD—SUBSEQUENT CEREBRAL SYMPTOMS—DEATH—ABSCESS IN THE BRAIN.

(Under the care of Dr. TUKE.)

John B., aged 47, attended at the York Dispensary in December, 1857, for chest symptoms. He had then no cerebral symptoms whatever, and only attended once or twice. In March, 1858, he was, however, seized with cerebral symptoms, hemiplegia, and convulsions. He became delirious, and sank into a state of coma, in which he died in about a week from the commencement of the attack. A few months before he had fallen on his head off a ladder, but no immediate severe symptoms followed. He was only seen by Dr. Tuke the day before his death. The following is Dr. Tuke's account of the autopsy:—

Autopsy.—Skull very thin. On attempting to remove the brain in the usual manner, pus exuded from the base, especially in the neighbourhood of the optic commissure. An abscess, about the size of a walnut, was found in the right hemisphere, a quarter of an inch below the superior surface of the hemisphere and just posterior to the ventricle. It had opened into the right lateral ventricle by a distinct opening. The septum lucidum was entire, but the matter filled both lateral, the third and the fourth ventricles, passing to the other side by the foramen of Monro. The brain was congested and soft, especially the right optic thalamus. Dr. Tuke believed the abscess was due to the accident.

In Dr. Tuke's patient the injury to which the abscess was referred had been received a few months previous to the recurrence of symptoms; but in Mr. Cock's case the accident happened only one month before death. A case somewhat similar, and in which the duration of an abscess in the brain was clearly not more than one month, is recorded in our Hospital Reports for December 8, 1860. The patient, a man,

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aged 49, was admitted into St. Bartholomew's Hospital for scalp wound, the bone being exposed. There was no manifestation of what would claim much attention as cerebral symptoms, until two days before his death, when he had rigors, followed by hæmorrhage. He was trephined, but did not improve, and died just one month after admission. An abscess in the hemisphere was found, and pus about the base of the brain and in the ventricles. In this case probably, as in the two given above, the acute attack dated from the time of probable rupture into the lateral ventricle. The only symptom that was at all marked before the last fatal seizure, was that he was rapidly getting thinner. We do not attempt to give the significance of this symptom. It was well marked, and believed to be out of proportion to the man's general appearance of health: we therefore record it.

In these three cases there was an abscess in one of the hemispheres which had opened into the lateral ventricle, and had thence found its way into the third, the fourth, and the opposite lateral ventricle. In all probability, Dr. Tuke's patient had been going about for some time with an abscess in one hemisphere, thinking himself well, and presenting no appreciable mental defect, the first symptom being at the time of rupture into the ventricle. It would appear that for ordinary purposes, one cerebral hemisphere answers as well as two, just as a person may go through life with one eye, seeing almost as well as with two.

In reference to the latency of such serious mischief we may quote Dr. Gull, who, in a paper in the "Guy's Hospital Reports," speaking of abscess in the brain, says:—"There may be absolutely no symptoms, and the abscess may be only accidentally discovered after the death of the patient from some other cause." When, however, any of the central parts of the brain are affected, as the corpora striata, pons varolii, etc., we should have lesions characteristic of those parts, as hemiplegia, etc. As bearing on this curious subject it will be remembered that large tumours of the brain are occasionally found in one hemisphere of the brain in persons who have died of some other disease in the thoracic or abdominal cavity.

The following is interesting as bearing on the treatment of abscess of the brain by operation.

Dr. Gull quotes a case which occurred in the practice of Dr. Detmold, and which is recorded in the *American Journal of Medical Science*, in which Dr. Detmold opened an abscess of the brain and evacuated several ounces of pus. The pulse rose from forty to sixty in the minute. The exposed brain cicatrised, and the man left his bed on the eighteenth day. Three weeks after the operation he began to lose his memory, but the brain had sunk in, leading to the hope that the abscess was closing. Headache and convulsions came on, and stupor followed. An incision was therefore made, an inch and a-quarter deep, into the brain, but no pus was obtained. The lateral ventricle itself was then laid open, and half-an-ounce of pus was evacuated. The patient died the same evening. Both lateral ventricles contained pus.

Disease of the nose will also not unfrequently give rise to cerebral abscess. Dr. Gull in his paper referred to gives two such cases. Dr. Weber, in the last volume of the Medico-Chirurgical Society's *Transactions*, records a case in which death took place from purulent meningitis in a case of ozæna. It is, therefore, of importance to bear in mind in cases presenting symptoms of "oncephalitis," the possibility of the nose, as well as the ear, being the origin of the evil.

In this Journal for October 8, 1853, is recorded a case in which abscess followed on caries of the orbit, and Mr. Nunn gives particulars of a case in the last Vol. of the Pathological Society's *Transactions*, in which abscess was associated with disease of the sphenoid, the supposed result of syphilis.

Disease of various parts of the ear has long been recognised as a frequent cause of cerebral abscess. We recorded a case in our Hospital Reports for 1860, p. 238, and many others in previous years. Long-standing discharge from the ear in persons otherwise healthy is always to be looked on very seriously, especially if the discharge comes from the tympanic cavity, the membrana tympani being destroyed, and the patient consequently deaf.

The first symptom of ill-health in a patient suffering from this infirmity may be the sudden accession of acute inflammation of the membranes of the brain, but not unfrequently warning is given that disease is extending by paralysis of the face, from injury to the trunk of the portio dura in its course through the ear. In Dr. Baly's patient, whose case is recorded below, this was the first symptom, the man being then otherwise in very good health.

ST. BARTHOLOMEW'S HOSPITAL.

DISCHARGE FROM THE EAR—PARALYSIS OF THE PORTIO DURA—SUPERVENTION OF CEREBRAL SYMPTOMS—DEATH—ABSCESS IN THE BRAIN.

(Under the care of the late Dr. BALY.)

William H., aged 66, was admitted an out-patient, under Dr. Baly's care, on December 2, 1860. He had found, on rising that morning, that his mouth was drawn to the right side. He was in other respects, he believed, in good health, and he appeared to be a healthy old man. He was deaf on the left side, and had had discharge from this ear for several years. The whole of the facial division of the seventh nerve on this side was paralysed. He was not able to close his left eye, and the mouth was drawn to the right, the healthy side. Dr. Baly diagnosed disease of the ear, which, by implicating the facial nerve, had produced paralysis. He directed the man to apply blisters behind the ear. Although the paralysis did not pass off, he considered himself to be still in good health otherwise, until the evening of December 8, when he began to feel giddy. His daughter said that he shivered in every limb. On the 9th he was seen by Mr. F. Marsh, to whom we are indebted for the notes of the case. He was then drowsy, and, unless spoken to and his attention roused, was continually dozing. At other times he had been delirious. His head was hot and face flushed, and his pulse was full and resisting to the finger, and in frequency about 100. The pupils were neither contracted nor dilated. Tongue furred, brown. In the evening he had an attack of convulsions which lasted for about ten minutes. It could not be ascertained whether one side or both were affected. Leeches were applied to the temple, and a blister at the back of the neck. He improved after the application of the leeches, but soon grew worse again. He was subsequently seen at home by Dr. Baly, who prescribed mercurials. He, however, gradually sank and died on December 25. At the *Autopsy* the dura mater was found to be very adherent on the left side. There was a large abscess in the centre of the right cerebral hemisphere. The other hemisphere and the cerebellum were healthy. The petrous bone was not examined. The thorax and the abdomen were not opened.

In this case, although the internal ear was not examined, there can be no reasonable doubt as to the cause of the abscess. It is a very tedious process to take out the temporal bone for careful examination; but when there is not time or opportunity to do this, some idea may be ascertained by a rough but very ready method,—viz., by breaking up the petrous bone by a chisel and hammer. Of the ear cases, the above is the only one in which the abscess was situated in the cerebrum. In the four cases below the disease was in the cerebellum.

LEEDS GENERAL INFIRMARY.

ABSCESS OF THE CEREBELLUM FROM OLD DISEASE OF THE EAR—RAPID COURSE—FATAL TERMINATION.

(Under the care of Dr. HARDWICK.)

[Reported by Mr. ED. GILBERT.]

Eliza G., aged 17, a mill-girl, was admitted into the Leeds Infirmary on January 16, 1861. Her previous health had been remarkably good, excepting that she had suffered from a slight discharge from the right ear, which had frequently recurred during the last five years. Its first appearance was not preceded by any distinct illness, and it was unaccompanied by pain or headache. Sometimes it has been bloody. Her father died of fever, and one sister of phthisis; the rest of the family are living and healthy. On January 9, without any apparent cause, she was seized with shivering, headache, pain about her right ear, and general febrile disturbance. On the following day she vomited; her bowels were acted on by a purgative, with apparent relief, so that on the 11th she walked out. On the 12th the vomiting recurred, and continued for several days; there was also delirium, but no palsy, twitching, or perverted sensation in the limbs of either

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side. When first seen, on January 17, she was suffering from severe deep-seated and frontal headache, rather more marked on the right side. There was also pain in the right ear; great tenderness, with indistinct fluctuations over the mastoid process; and a slight purulent discharge from the ear. Her expression was dull, yet indicative of severe pain. There was a distinct squint, but neither ptosis nor paralysis of the face or limbs. Her skin was warm and moist; face not flushed, nor eyes injected; head not particularly hot. She complained of having noises like the ringing of bells. Pulse 108, regular, of moderate volume and power. Respirations regular, twenty-six per minute. She had a little dry cough, with rhonchus and numerous *rdles* heard over the chest. Other organs healthy. Tongue thickly coated with aphthæ, on a bright red ground. Urine acid, of sp. gr. 1014, containing a trace of albumen. Four leeches were applied over the mastoid process, and afterwards a linseed poultice. The head was shaved, and covered by rags dipped in lead lotion. A saline mixture, with carbonate of soda, was given, and liquid diet only. She was kept as quiet as possible. Her bowels had been freely opened by an enema the day before.

January 18.—She had a severe rigor last night, but slept well. There was no delirium. Her countenance was not so dull this morning, and the squint less marked.

19th.—She seems brighter. No squint. The discharge comes more freely from the ear, and pressure on the mastoid process forces air and pus from the meatus.

21st.—She has been restless during the night, frequently moaning. This morning she is only partially conscious; she lies still, with closed eyes and placid countenance. Discharge from the ear has almost ceased, and there is no evidence of pus collecting over the mastoid process. Pulse 140, feeble. Respiration sighing and irregular. Slight squint.

22nd.—She became more sensible towards night, but obtained little sleep. This morning she had a severe rigor. Pulse very rapid and feeble; respiration laboured. Tracheal *rdles* supervened, total insensibility, and death.

Post Mortem, about Twenty Hours after Death.—Only permission to examine her head could be obtained. Body well nourished. On removing the scalp the pericranium over the mastoid portion of the right temporal bone was found to be detached. There was a little matter at the part, and a communication could be traced from this into the external meatus. When the calvarium was removed the upper part of the membranes and the surface of the brain were found to be healthy. The amount of blood in the vessels seemed normal; subarachnoid fluid rather increased. Over a part of the squamous and petrous portions of the right temporal bone the dura mater was detached, its outer surface being coated with lymph and pus; the lateral sinus at this point was involved in the inflammation, the bone itself was hard, firm, and smooth. The colour of the dura mater and arachnoid at this part was changed into a slate-blue, and the corresponding lobe of the cerebellum contained an abscess, which extended close to the surface; it was about the size of a walnut, with greenish, fetid pus, and had irregular, soft, shreddy walls. The remainder of the brain-substance was quite healthy.

Mr. Gilbert, the reporter of the case, remarks that this case bears out, as much as a single case can do, the opinion of Mr. Toynbee as to the connexion of disease of certain parts of the temporal bone with certain parts of the brain.

ST. MARY'S HOSPITAL.

NECROSIS OF THE PETROUS BONE, CAUSING DESTRUCTION OF ITS MIDDLE THIRD, AND AN ABSCESS IN THE CEREBELLUM.

(Under the care of Mr. TOYNBEE.)

C. H., aged 25, was admitted into St. Mary's Hospital, under the care of Mr. Toynbee, on October 13, 1860, on account of intense pain in the right ear and side of the head. The history of the case was that at the age of 14 he took a bad cold, which was followed by pain in the right ear; attacks of pain occurred at intervals until he was 20 years of age, when discharge took place; this was followed by a cessation of the pain, but total deafness supervened. Seven months before his admission into the Hospital he was again seized with intense pain in the right ear and side of the head, followed by paralysis of the muscles on the right side of the face. When admitted he had every symptom of acute caries or necrosis of the petrous bone, viz. intense pain in the ear, extending over the side of the head, copious discharge of a highly fetid character, and polypoid growths in the meatus. Every attempt to diminish the pain and to arrest the progress of the disease was of slight service, and the patient died on the sixteenth day after his admission into the Hospital.

Autopsy, Twenty-eight Hours after Death.—The dura mater and arachnoid covering the cerebral hemispheres were healthy; the vessels of the pia mater were distended. The convolutions were somewhat flattened. Both lateral and the third ventricles were distended with transparent serum. The right hemisphere of the cerebellum was adherent to the dura mater covering the posterior surface of the petrous bone. The substance of the cerebellum at this part was soft, and it formed part of the wall of a small abscess, which contained green, fetid pus. The dura mater at the posterior part of the petrous bone was at one point of a dark colour, and softer than natural. Upon removing the dura mater from the petrous bone, the central part of the latter was found to be entirely destroyed, the apex of the base being attached to the outer part by fibrous tissue. New bone was observed on the inner and on the outer surface of the squamous bone.

It may not be uninteresting whilst dwelling on this subject to allude to a very rare result of disease of the ear. Mr. Toynbee has recorded in the Medico-Chirurgical *Transactions* for 1860 a case in which the internal carotid artery had been opened, by ulceration from extension of disease of the petrous bone.

The following case presents some features differing from the others. In this case cerebral symptoms commenced three years before death, but it is at least probable that they were at first those of genuine epilepsy, for which the patient was treated. The series of symptoms connected with the immediate cause of his death probably began on November 26, the day on which he had first severe pain in the ear.

THE LONDON HOSPITAL.

DISCHARGE FROM THE EAR — EPILEPSY (?) — SUPERVENTION OF ACUTE CEREBRAL SYMPTOMS —DEATH—ABSCESSES IN THE CEREBELLUM.

(Under the care of Dr. DAVIES.)
[Reported by Mr. W. G. PAYNE.]

John C., a fine, tall youth, with dark hair and eyes. He had measles at three years of age, and had had a discharge from both ears till during the last three years. He had always been most temperate in his habits, and never known to get drunk. In December, 1857, he fell off a lighter into the river Thames, it was a very cold night, and, although a good swimmer, he was very much frightened. He went to bed; also to work, as usual, the next day. Three or four days afterwards, while waiting in his employer's office, he was seized with a "fit," and was brought home by some of the men. His mother states that he looked very wild and excited, then became stupid. It soon went off. He slept well the same night, and went to work the following morning. The fits now re-appeared about every seven days, seldom exceeding that period of intermission; and when they came on he was seized without the slightest warning. He used to become quite black in the face, foam at the mouth, clench his hands, and bite his tongue. He has often been seized in the streets, and fallen and cut his head and face. Several of his front teeth are broken from the effects of the falls. He continued at work notwithstanding the fits up to May, 1859, when he became an out-patient, under the care of Dr. Andrew Clark, who treated him for epilepsy. He continued under treatment for three months, the fits recurring, as usual, every week; but now and then keeping off for three weeks.

He neglected to attend, and remained at home and from his work till November 26. He then complained of pain in the right ear, which in a day or two became very acute. Bread poultices were applied, and an offensive discharge followed, which continued for a few days and then ceased to flow. The fits now left him. The discharge also discontinued, but the pain became most severe, and extended all round the back part of the head. He now had delirium every night; very little rest, could not eat, and became very low and weak. He kept his bed for six weeks. His mother brought him to the Hospital. He was at once admitted,

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under the care of Dr. Davies, on January 10, 1860. When seen in bed he appeared in great pain, looked dull in the face, but was quite sensible. His pupils were natural; pulse 70; tongue slightly furred. He was ordered an aperient of calomel and jalap. Quinine was given, and a blister was put on the back of the neck. He was placed on a diet of milk and beef-tea, with two ounces of wine daily.

January 11.—He passed a restless night; slept little; moaned and ground his teeth during his sleep. He took his medicine and diet during the day. Towards evening he became very delirious, raving and shouting; his head was shaved, and tartar emetic ointment was applied and soon took effect. Pulse 80.

12th.—No better; bowels opened twice; urine free. The wine and quinine were omitted. Five grains of the iodide of potassium were given three times a-day. The delirium continued during the day; but he became quiet towards the morning, and had a little sleep. Pulse 60.

13th.—He slept several times during the night, and was occasionally sensible. He also spoke and complained of intense pain in the head and right ear. He took his food and medicine. Pulse 64. Pupils normal. Skin cool. He continued better till six p.m. He was then suddenly seized with a fit; became livid in the face, foamed at the mouth. Fit lasted five minutes; but he continued insensible, and had stertorous breathing. The pulse rose during the fit to 150; the pupils became contracted. He continued in this state for two hours, and then died.

Post-mortem, Ten Hours after Death.—Rigor mortis complete; body clear, except upon the back, which was livid. Upon removing the calvaria, the membranes were found normal. The cerebrum was pale and bloodless; but the ventricles were filled and bulging with a clear, serous fluid, about an ounce and a-half. Upon removing the brain, a large cyst (the size and shape of a large Spanish chestnut) was found in the anterior part of the right hemisphere of the cerebellum, filled with a purulent-looking fluid, which consisted principally of blood discs which had lost their colour, studded with granules and variously bent. There were also present pus globules, granule cells, much fat and cholesterin. The anterior part of the cyst wall (about one-third of it) was formed of dura mater, and which was perforated by a small valvular opening that led to a canal in the temporal bone (around which the bone was carious), which communicated with the meatus auditorius externus. The posterior part of the wall of the abscess (two-thirds of it) was formed of a dense, firm membrane, about one-sixth of an inch in thickness. It consisted of well-developed, white fibrous tissue, which on its free surface was coated with granule cells, and in its deep part traversed by a close net-work of blood-vessels. A second abscess, about the size and shape of a small walnut, lay immediately behind that just described; it was completely isolated, with a wall and contents like the other. A third abscess, larger than either of the other two, lay immediately internal and parallel to them. It had no defined wall, and was occupied by a different mass, composed of disintegrated brain-tissue, extravasated blood, granule cells, and pus globules. The left hemisphere of the cerebellum was healthy.

GUY'S HOSPITAL.

DISCHARGE FROM THE EAR—ACUTE CEREBRAL SYMPTOMS—DEATH—ABSCESS IN THE CEREBELLUM.

(Under the care of Dr. GULL.)

Harriet F., admitted on November 23. She had acute head symptoms, following a discharge from the ear, which she had had nearly all her life. Abscess in the brain was diagnosed. She died on the 25th. The following account of the autopsy is copied from Dr. Wilks' post-mortem register:—

On removing the dura mater, a slight amount of arachnitis was found to be present, as was indicated by the greasiness to the touch. The hemispheres were somewhat flattened. On slicing through the brain the effusion in the ventricles was very considerable, amounting to about an ounce in quantity. On removing the brain an abscess was found in the right lobe of the cerebellum, communicating with a diseased spot of the dura mater and bone, for about the size of a threepenny-piece. On cutting through the lobe, nearly the whole of it was destroyed, but the abscess reached the surface only at the part mentioned. The interior of the lobe was filled with a greenish pus and *débris* of brain-substance of a very fetid odour; when these fell from it, there was found a large cavity; the brain elsewhere was healthy. A round spot of softened dura mater, in contact with the cerebellum, lay at the extremity and posterior part of the petrous bone close to the jugular foramen. At this spot the disease of the bone touched the sinus, but below the whole lateral sinus was healthy, containing a little soft coagulum of ordinary character. The jugular vein, also, in the neck was unaffected. The extremity of the posterior wall of the petrous bone was carious, and had a large opening, which was exposed on tearing off the dura mater.

Dr. Ogle, in a paper, in the tenth volume of the Pathological Society's *Transactions*, expresses the opinion, that abscesses of the brain often arise from occlusion of the veins and sinuses of the brain. "We," he writes, "know that a sloughing or purulent condition of parts, especially such as are rigid and inextensible, like bone (and this will more manifestly be so in the case of the inner ear, boxed up, as it were, in the midst of the unyielding petrous bone), is very apt, particularly in debilitated constitutions, to produce what is termed pyæmia, for which dangerous result no doubt the plugging or sealing up of the neighbouring venous canals is Nature's best and readiest method."

He believes that, in many cases, as well as those which are dependent on disease of the bones of the ear, as those which are more clearly pyæmic in character, abscess results from infarction of the cerebral veins or sinuses. He believes that the "sanguineous overcharging" of the parts which are ordinarily drained by the affected vein, produces "quite as dire effects as does an over diminution of blood supply (leading to atrophic disintegration)."

We have recorded several cases which illustrate the effect of diminution of supply of blood to the brain in the production of abscess. In one case in which Mr. Stanley ligatured the carotid for wound of the tonsil, on October 24, 1860, the patient was steadily but slowly improving, until December 20, when he had pain in the head, followed by stupor, vomiting, and hemiplegia, and subsequently by coma. He died on the 24th. A small abscess was found in the anterior part of the left hemisphere. The posterior part of the same hemisphere was much softened. The following case, in which the occlusion of the carotid followed a wound, is recorded in our Hospital Reports for September 8, 1860.

A boy, aged 4, was admitted into St. Bartholomew's Hospital, under the care of Mr. Lloyd, on April 4, for a wound in the right side of the neck. Hæmorrhage recurred at various times until April 29. On that day he had a "fit," remaining paralysed on his *left* side. He had no further marked symptoms, and died on May 9. The *right* hemisphere was found softened, and there were two circumscribed abscesses in the middle, and one in the posterior lobe. Here, of course, the abscesses were the result of cutting off the supply of blood, as was shown by softening of the hemisphere. A third case is given in our Hospital Reports for June 19, 1858, in which abscesses in the brain followed on obliteration of the carotid by the pressure of a polypus.

The following case is one in which the abscess appears to have been pyæmic in character, pyæmic suppuration having taken place in the liver and spleen.

PYÆMIA—NUMEROUS ABSCESSES IN THE BRAIN—ABSCESS IN THE SHEATH OF THE RECTUS ABDOMINIS MUSCLE—INCIPIENT PURULENT INFLAMMATION IN THE LIVER AND SPLEEN.

(Under the care of the late Dr. ADDISON.)

Richard F., admitted November 13, 1854. He walked to the Hospital, and was about the ward. He had an abscess on the left side of the chest, which was spreading. On the following day he took to his bed, and never again left it. He had only observed it three days before, but had had an attack of shivering three weeks before.

On the 17th it was observed that the left side of the face had fallen without any complaint.

On the 18th his speech faltered, and he had difficulty in swallowing. He was altogether powerless, but the left side appeared the weaker.

After the 19th he never spoke distinctly. After the 20th

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his motions and urine passed involuntarily. The urine was slightly albuminous.

On the 22nd he was partially sensible to his wife, but the difficulty in swallowing was greater, and he gradually sank into an unconscious state.

The paralysis was probably not well marked, as there was a difference of opinion as to which side of the face was fallen. One gentleman thought the face was not straight on admission.

At the autopsy there was found at the insertion of the left rectus to the ribs an abscess occupying a space of about three square inches. The scalp was healthy; the cranial bones were free from disease; the internal ears were normal; the sinuses appeared quite healthy. The cerebral arachnoid and piamater were covered with an opaque lymph, which in one spot was thick and yellowish. The whole surface was greasy. The anterior part of the right hemisphere was rounded, swollen, and projecting, indicating fluid matter beneath. The abscess immediately beneath had almost broken through the surface. This was about the size of a walnut. It was situate quite at the upper and anterior part of the right hemisphere. At the extreme posterior part of the same hemisphere, and close to the median line, was another abscess, somewhat larger. Between these two were three other abscesses in the white structure of the right hemisphere each about the size of a walnut. The matter was greenish, mucoid, and very fetid. The surrounding brain was healthy. All three were isolated. On the under surface in the left lobe of the cerebellum, another abscess of the same size existed: this had so involved the gray matter that it burst on removal. Ventricles healthy. Central ganglia unaffected.

The superficial abscess in the sheath of the rectus before indicated did not affect the deeper-seated parts.

The liver was rather pale. In two places at the anterior border were two isolated portions of about half-an-inch square, of a pale colour and soft, and apparently in a condition of soft suppurative inflammation.

The cut surface of the spleen was coarse, soft and variously coloured, and appeared, like the liver, as if in the first stage of suppurative inflammation.

Kidneys healthy; one or two small cysts, and two small white points. These appeared old concretions rather than recent deposits.

This case is one of those recorded by Dr. Gull in his paper in "Guy's Hospital Reports." He says: "It is a characteristic example of the insidiousness of pyæmic suppuration in the brain. Slight facial paralysis was the first symptom, but for this, and the occurrence of a slight rigor, there was little to distinguish the case from one of ventricular and subarachnoid suppuration in a subject debilitated by chronic disease."

KING'S COLLEGE HOSPITAL.

STRICTURE OF THE URETHRA TWICE TREATED BY PERINEAL SECTION.

(Under the care of Mr. HULKE.)

Case of Old Stricture of the Urethra, Divided through the Perineum; Three Years afterwards an Abscess in the Scar, Burst by a Blow; Urinary Fistula; nearly complete Obliteration of the Urethra for Three Quarters of an Inch; Operation for the re-Establishment of the Canal; Successful Result.

James P., aged 30, a red-haired, large-boned labourer, greatly addicted to beer and venery, was re-admitted into Fisk Ward, King's College Hospital, on July 8, 1859, with a stricture of the urethra, dating from a neglected clap, caught when he was fifteen years old. He had also a fistula in perineo.

He had previously been in the Hospital in 1856, when Mr. Lee, who at the time was acting for Mr. Bowman, divided the stricture through the perineum, and fixed a large flexible catheter in the bladder. Unfortunately, in the evening after the operation, the catheter slipped out, and this accident was followed by extravasation of urine, sloughing, and nearly fatal hæmorrhage. The wound healed slowly, and at the time of his leaving the Hospital, several months after the operation, he made water in a small and irregular stream with straining, and no catheter could be passed through the obstructed part of the urethra. He continued much in this state till March, 1859, when a circumscribed abscess formed in the scar in the perineum; it acquired the size of a walnut, and was at length burst by a severe fall athwart a beam of wood. The blow occasioned great pain at the time, and an hour afterwards, in micturition, he found that urine escaped through his perineum. A week after this accident, when he came into the Hospital, his perineum was much swollen, and just on one side of the raphé, in the scar of the former operation, there was the orifice of a fistula, through which nearly all the urine was discharged, only a drop or two occasionally trickling from the penis.

During six weeks several patient but unsuccessful attempts were made to pass a catheter; then potassa fusa was applied to the front of the stricture four times, and on each occasion the bougie appeared to enter a little further. After the last application a few drops of urine trickled from the penis, but the caustic gave so much pain that he was impatient of its further use. I now decided on trying to re-establish a communication between the posterior and the anterior pervious portions of the urethra by operation, and, on September 17, carried out the attempt successfully in the following way:—I first slit up the perineal fistula towards the scrotum on a director, with which I detected the orifice of the urethra behind the stricture. Having slid the director along this part of the urethra into the bladder; a dresser held it whilst I introduced a large staff through the penis as far as it would go. With the finger in the rectum I felt that the end of the staff passed about ¾" to the left of the director into a pouch, of the size of a filbert, between the bladder and rectum, and which I supposed had been made by the caustic potash. Withdrawing the staff till its extremity was vertically over the director, the two instruments were found separated ½" by a mass of dense fibrous tissue, after dividing which I was able to push the staff along the director into the bladder. Both instruments were removed, and I had no difficulty in replacing the staff by a large flexible catheter.

On the second day he had a rigor, was anxious and depressed. This was due to an indiscretion in diet, and vomiting was followed by complete relief. The catheter, at first, was changed every three or four days; but after a fortnight it was only introduced when he felt a desire to empty the bladder. Just one month after the operation the wound had entirely closed, and only slight thickening of the perineum remained. He was discharged a few days subsequently with instructions to pass occasionally a No. 8 catheter, which he had learned to do.

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Medical Times and Gazette.

SATURDAY, FEBRUARY 23.

OBJECTS FOR ASSOCIATION.

We lately inserted a letter from Mr. Griffin, of Weymouth, in which he stated that he had received £28 7s. from sixty Poor-law Medical Officers, subscribed to defray the expenses he had incurred in furtherance of Poor-law Medical Reform, and asking for £20 more to enable him to have a Bill drawn up by a Parliamentary Draftsman. More recently, a meeting of Practitioners and Students has been held in London in favour of his Bill.

In the United Kingdom seven millions sterling are ex-

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pended annually upon the relief of about one million poor persons—we give round numbers. Workhouse charity is proverbially cold; for, although poverty is not a crime in the eye of the law, the official relief of it is made as disagreeable as possible to the recipient, with the hope of repelling the lazy vagabond from the public purse. Thus honest poverty is punished, lest dishonest poverty should flourish.

It is probably very necessary that the parochial money-bags should be held with a hard grip in so far as able-bodied paupers and their families are concerned. But when we find that the sick poor are involved in the same stern system of repelling stint, we are at liberty to say that it outrages the best feelings of our common humanity. We respect even a foe struck down by the hand of Providence, and so we feel that a sick pauper, however undeserving he may be morally, has as fundamental a right to the solace of Medical art as any other person. It is for God, not man, to sit in judgment on the sick.

These are not, however, the views of Boards of Guardians of the Poor, who would stint them of Medical relief in the same spirit that they deprive their beds of curtains. Hence the miserable pittance so often doled out to the Poor-law Medical Officer; hence the continual reproaches to which he is exposed if he order his half-starved patients beer and mutton-chops instead of salts and senna. Ample experience has demonstrated that these Boards are utterly incompetent to deal with the business of parochial Medical relief. Nor is it to be expected they will ever be otherwise, for competence in that point implies a practical knowledge of the causes of disease—especially among the poor.

Such knowledge, we need not say, is far beyond the farmers, shopkeepers, and self-made men barely competent to write their names, who usually constitute the working majority of the Board. We leave magistrates—the *ex officio* members—out of consideration, for it is well known they seldom attend Board meetings.

Under these circumstances it is obvious that the statesman-like course would be to take the relief of the sick poor out of the hands of the Boards of Guardians altogether, and make it a scientific branch of the public service. As such it would soon be raised in public estimation, and therewith the moral dignity of the whole Profession, which necessarily suffers hurt by the debasement of any of its members, advanced. An entrance examination in special departments of Medicine would be required, as is the case with the Army and Navy Services; in particular, a knowledge of the principles and practice of public hygiene and of the treatment of the insane, should be demanded of the candidate for the Civil Medical Service, as it might be termed. It would be then an excellent training-school both for ordinary practice and the highest department of Medical art—the preventive. Nor if the appointments were made only moderately remunerative, and thrown open to public competition, would it fail to attract to it much of the rising talent of the Profession, and thus be made available to the advancement of Vital Statistics, Medical Topography, Epidemiology, and other departments of Medicine, which can only be cultivated by men competent both as to intellect and training, with such opportunities of observation as Poor-law Practice necessarily affords.

Mr. Griffin and his colleagues have endeavoured to enlist the sympathy and support of the Profession generally in their favour. But although all doubtless wish them every success, it is the Students of Medicine who have been most actively helping them. It is certainly a severe reflection upon the Medical Corporations and Associations, that so important a question of political economy should thus be abandoned to a body of badly-paid over-worked officials, and to the very juniors of the Profession, whose power to exercise the necessary influence on public opinion is obviously small. An enlightened plan of Public Medical Charity would not only provide for the most efficient relief of the sick poor, but would at the same time so certainly serve to advance some of the most important departments of Medical Science, and raise the Profession in public opinion, that to form and carry out such a plan would be worthy the best efforts of the greatest statesmen, and therefore is a fit object for the united and persevering efforts of the Medical Corporations: yet they prefer to wrangle and scheme about the profitable grant of licences, and the filling of their coffers thereby. We fear that, as at present constituted, the Colleges must be considered as worse than useless for these and other medico-political objects. Their silence and inertness constitute, in the eyes of politicians, a condemnation of the efforts of public-spirited men like Mr. Griffin, and thus they are actual obstacles to all attempts at improvement.

The question of reform of the Colleges must sooner or later be thrust upon the Profession. Under present arrangements they serve mainly to supply lucrative offices as Examiners and the like for a few Members or Fellows resident in the metropolitan cities; the great majority of the Profession dwelling even in the latter, still less in the provinces, has no real influence over their proceedings, or any practical share in their government.

Nor must we omit to notice the shortcomings of the British Medical Association in these respects. While it boasts its commercially cheap Journal, we may be permitted to remind the members that 2½d. from each of them would give Mr. Griffin his desiderated £20, with a handsome surplus; we trust, therefore, the Council will vote him that sum at once. And while we wish Mr. Griffin every success in the attainment of his modest objects, we must say we hope the time will come when the Profession will resolve to take this matter in hand, and insist upon having a Civil Medical Service, thoroughly organised for the fullest efficiency. An annual subscription of half-a-crown from 16,000 members would raise £2000 per annum, a sum amply sufficient to carry out an efficient agitation of this or any other great Professional object.

THE WEEK.

Our readers who may not be personally acquainted with Dr. Jenner know him so well by means of his numerous lectures and papers published in this Journal that they will hear with peculiar pleasure of his appointment to succeed Dr. Baly as Physician to Her Majesty. We have so frequently had to remark, in common with the whole Profession, with what singular judgment and care the Medical appointments at Court have been made for many years past, that we may appear to be always repeating an old story; but it is a true story, and therefore can hardly be told too often. In this instance the wisdom of the choice of Dr. Jenner will be ratified by the verdict of the Profession; and all will join cordially in the wish that he may live many years to enjoy the high position he has so well earned by real honest work.

The discussion as to the amalgamation of the Medico-Chirurgical Society with the Pathological, the Epidemiological, and the Obstetrical has advanced a step. It has been found that it will be necessary to obtain a Supplemental Charter for the Medico-Chirurgical Society before the proposed scheme of amalgamation can be legally carried out; and the details of the arrangement are now being discussed, preparatory to the united application for the Supplementary Charter. We trust that no minor differences will become serious obstacles to the accomplishment of a measure which, we believe, is likely to prove, if fairly carried out, of immense benefit to Medical science. In the meantime we trust that the Council of the Medico-Chirurgical Society will adopt some means of

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ventilating the room in which the meetings of that Society, and of the Pathological and Obstetrical, are held. On the night of any of these meetings, the unfortunate Fellows present are doomed to sit at the bottom of a well, to which air only finds access through two outer rooms and a passage, all lighted with gas, the temperature towards the close of the meetings strongly reminding one of those hot chambers filled with carbonic acid and the impure exhalations from the skin and lungs of the confined sufferers now dignified by the name of Turkish Bath. On the Pathological nights, when the vapour of methylated spirit and decomposing specimens is added to the ordinary effluvia, the atmosphere is indescribably offensive. That such a state of things should exist in a Society of Medical men in this age of Sanitary Science is really disgraceful, especially as nothing more is wanting than one of McKinnell's concentric tubes in the skylight or roof to ventilate the room thoroughly.

We are assured that the reports published by some of our London and Dublin contemporaries, and which have been copied into the newspapers, alleging that the extraction of the cataract from Sir Benjamin's Brodie's right eye had failed, are very erroneous. On the contrary, we have the very highest authority for stating that those best qualified to judge entertain well-founded hopes of a successful result. We think the sort of secresy that has been maintained about this operation is very unwise. This alone led to the fear which was the father to the false reports. It would have been far better if the operator had written a daily bulletin, which any friend of Sir Benjamin's could have seen by calling at his house. This would have been done for any sprig of royalty, to whom the Medical Profession would not have given more than a passing thought, while the fate of the venerable Surgeon has been to all a topic of daily interest.

At the adjourned inquest, on Friday, February 15, on the bodies of the four men who perished in the Fleet-lane sewer, Dr. Letheby gave it as his opinion that they had died from the effects of sulphuretted hydrogen, suddenly discharged into the atmosphere of the sewer. Three probable sources of this gas presented themselves. First, the discharge into the sewer of a large quantity of gas refuse, or "blue Billy;" but as there was no evidence of this, the hypothesis was dismissed. Secondly, the mechanical disturbance or stirring of the mud, by the tide or some other cause; but he did not think the quantity of mud deposited great enough, or its character such as to support this theory. The third was the action of an acid on the compounds of sulphur with iron or lime which are found in sewage, and to which the deposit owes its peculiarly black colour. It will be granted that such a cause is sufficient, and it was shown that such a cause existed; for Messrs. Tylor, brass-founders, in Warwick-lane, use large quantities of sulphuric and nitric acid in cleaning their castings, and discharge the waste acid into the drains. It was their practice, it is said, to let off about 80 or 90 gallons of acid liquor *every morning* into their drains. Dr. Letheby showed by experiment that the acid liquor from Messrs. Tylor's factory, applied to the sewage mud did cause evolution of sulphuretted hydrogen; and so the chain of evidence satisfied the jury that the last hypothesis was the true one, and they returned a verdict of "accidental death." A few years ago a man was suffocated near Drury-lane by a sudden evolution of sulphuretted hydrogen, owing to the discharge of some mineral acid into a sewer, and it has been proposed by Mr. Nourse, of Brighton, who suggested this as the cause of the present accident, that any such discharge should be forbidden under a penalty. Still, in the interest of the public, we desire to remark, that whereas Messrs. Tylor allege that they let off a large quantity of acid liquor every morning, we meet with no explanation of the cause why so much more gas was evolved on one particular morning, and why the "ample ventilation" with which the Fleet sewer is said to be provided should have proved inefficient on that one occasion. It must be palpable to every one that vast quantities of the mineral acids must be continually discharged into the London sewers from factories and chemical works, and that if it be not neutralised at hap-hazard by an equivalent of alkali, or by the ammonia engendered by decomposition, the labourers in the sewers may be poisoned summarily, or the general atmosphere be deteriorated by the more slow and dilute emanations resulting from "the ample ventilation of the sewers."

The letter from our Malta Correspondent will be read with great interest. One of our body has been charged with ignorance, negligence, and inhumanity. He has been tried by a Court of Naval Captains,—a class of men about as incapable of deciding a Medical question as a Court of Medical men would be to decide some intricate question of navigation, seamanship, or gunnery. It can be no discredit to a Medical man to be condemned by such a Court,—but the verdict might have a most disastrous effect upon Naval Medical Officers, leading them to shrink from a strictly just performance of their duty; and—in the exercise of the frequently difficult task of maintaining as many effective men as possible in the ship's company while duly attending to the ailments of the sick and injured—to look rather to their own safety from censure than to the good of the Service. Dr. Monteith is censured for sending men to duty too soon. The next Court-martial may censure somebody else for keeping men on the sick-list too long. The independence of the Medical Service will be lost if a Court incapable of deciding upon Medical questions is to interfere with the strictly Professional part of the duty of Naval Surgeons. We trust that this absurd verdict will be brought before Parliament, and will lead to a reform of one of the greatest anomalies of the age we live in—a Naval Court-martial.

The Scottish Medical Practitioners are compelled by the 17 and 18 Vict. c. lxxx. to send to the Registrars a notice of the death of any person upon whom they may have been in attendance during his last illness and until his death, under a penalty of 40s. By a late Act, 23 and 24 Vict. c. lxxv. Sect. 14, the above enactment is deprived of part of its harshness and discourtesy; for it is declared that in case the certificate be not transmitted within seven days, the Registrar shall transmit to the Medical person a form of the certificate required by the Act, and a requisition requiring it to be filled up and returned within three days. In a case just decided by Sheriff Bell, in the Glasgow Sheriff's Court, John Coats, M.D., having received a requisition and blank certificate from a Registrar, and having filled it up, claims 2s. 6d. remuneration for so doing, and sues the Registrar for that sum. The Sheriff remarked that there was much equity in the Plaintiff's claim, that he should not give his time and trouble for nothing,

"But there are," said the Sheriff, "two difficulties in the way of his succeeding in the action. The first is, whether the Acts in question have not imposed the duty upon him as a *munus publicum*, which he is to discharge without remuneration; and the second is whether, though he were entitled to a fee, the defender *qua* Registrar is liable in payment of it. It is plain that under the first Act the 'Medical person' incurred a penalty of 40s. if he failed to transmit the certificate. It may, perhaps, admit of doubt whether this penalty is still exigible under the altered enactment of the last statute, but under neither Act is any

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provision made for remuneration. If it could be held that no penalty is now incurred by failure to forward the certificate, the grievance complained of might thus be got rid of. But that question does not arise here, for the certificate was sent in compliance with the defender's requisition. There is nothing in the Registration Acts themselves to show definitely whether the Legislature intended that the 'Medical person' should or should not be remunerated, except that the Acts contain no provision or machinery for giving remuneration."

The services rendered do not come within the description of Medical or Surgical aid, advice, visits, or medicines, for which every Registered Practitioner is entitled to recover charges and costs.

"Where a thing is required to be done under a penalty, with a view to a national or general benefit, and no recompense provided for doing it, the presumption rather seems to be that it is to be done gratuitously. Similar questions have occurred under other Acts. Thus, by the Lands Valuation Act, the Clerk of Supply is directed to furnish a copy of portions of the Valuation Roll. But there is this difference, that the recipient of the Valuation Roll gets it for his own use and benefit; whereas the Registrar derives no personal advantage from the Medical certificate. Again, under the Smoke Nuisance Abatement Act (20 and 21 Vict. c. lxxiii.), it is provided that the concurrence of the Lord-Advocate must be obtained to all complaints. But then the statute enacts, that the whole expenses of the procedure are to be borne either by the complainer, if unsuccessful, or by the party complained against, if convicted; and thus there is no difficulty in providing for the fee given to the Lord-Advocate, as a part of the necessary expenses. But why should the Registrar, who, in writing for the certificate, does only what he is bound to do under the Act, and gets no payment for his trouble, be held liable in payment to the Doctor?"

Neither is the sum now sued for a necessary disbursement of the Registrar's, in the discharge of his duties

"but a payment to a third party for something done in the execution of that party's office. As the Acts at present stand, therefore, there is no valid claim against the Registrar by the 'Medical person.' If he is still bound under a penalty to give a certificate of the death and cause of death, it may perhaps be worthy of consideration whether a fair fee for doing so is not chargeable as a part of the death-bed expenses of the deceased patient. Such fee would at all events be exigible, if intimation were made beforehand by the Medical attendant that, where death occurred, it would be charged as a portion of his account, or if a general notice to the same effect was given by the Medical Practitioners in any town or district."

The following is a copy of the opinion of counsel on the case referred by the Executive Committee of the General Medical Council, upon which the right of the Irish College of Physicians to style their Licentiates Doctor in the Register has been decided:—

"1. Supposing the College to have no larger powers than are disclosed in the case laid before the Attorney-General for Ireland, we are clearly of opinion that it has no power to confer the Degree of Doctor of Medicine; and without the Degree there can be no right to title, to whatever extent it may have been conceded by courtesy.

"2. We are of opinion that the title in question is not one of the qualifications mentioned in Schedule (A) of the Medical Act, which only mentions Fellows and Licentiates of the Irish College of Physicians.

"3 and 4. We think that the Registrar of the General Council is not bound to copy into the General Register entries in the Local Register which on their face are erroneous, nor to enter as qualifications particulars which are not within the terms of the Act, and are contrary to the orders and regulations of the Council.

"The remedy should, in our opinions, be found in a correction of the Local Register. We think it the duty of the Local Registrar to keep his Register in conformity with the lawful directions of the General Council, or of the Executive Committee, to whom they have delegated their powers; and if he fails in this duty, probably a *mandamus* could be obtained to compel him to perform it. It is, however, most likely that, as the General Council have the power of publishing the Medical Register in the proper form, it will be found that this is practically the only matter of importance; and the Irish Branch Council will think it useless to continue the controversy.

(Signed) "H. M. Cairns.
"Arthur Hobhouse.

"Lincoln's-inn, January 31, 1861."

We publish in another column the Examination Papers set at the first examination of the new Army Medical School at Chatham. It will also interest our readers to know that each of the gentlemen examined had three hours for written and three hours for his practical work. In the practical examination for Pathology they were at liberty to choose any four questions of different values. The topics on which the questions were based are all such as were fully and practically illustrated during the courses of instruction, by examples occurring amongst the soldiers in the Medical and Surgical wards, or in the post-mortem room. The competition was, on this occasion, merely *tentative*, for the purpose of ascertaining how far, *in future*, the results of a competitive examination at the end of the Chatham course of instruction could be added to the numbers gained by the Candidates at the London Examination. In future, then, the results of both examinations added together will decide the final places of the Medical Officers in the *Gazette*. In the meantime, with the present set of Candidates it was agreed that the places acquired by them at the London Examination (and at that time made public) should not be altered by the Chatham Examination. All the Medical Candidates who have been instructed at the Army Medical School have passed the Examinations with greater or less credit; and of each and all of them the Professors have certified that they are qualified for the practical duties of an Army Medical Officer. They are now, therefore, eligible for commissions as Assistant-Surgeons.

Lord Herbert spoke in the following gratifying manner of the Medical Department of our army in China, when proposing the thanks of the House of Lords to that army:—

"Let me mention two or three peculiar features of this campaign. First, we have had no failures in the civil department of the expedition. It had an excellent Medical staff; and for the first time an attempt has been made to introduce the system of appointing a Medical Officer for purely preventive and sanitary purposes. The result has been, I am told, that not only has there been more attention to prevention, at all times better than cure, but it has diffused the same spirit of care among the officers, and certainly the greatest success did attend the operations in a sanitary point of view. I have heard criticisms made of the cost of these precautions, and I have heard it said that if the cost of these Hospital ships were divided by the number of patients on board of them it would show that each patient cost an extraordinary amount. But that was because the expedition had been so singularly healthy. (Hear, hear.) If there had been a great amount of sickness the cost of each patient would, of course, have been much less, but the apparent large cost is the result of the success which has attended our sanitary precautions. (Hear, hear.) After all, what expense can be too great, within reasonable limits, which ensures that your army shall be perfectly efficient? (Hear, hear.) When, including casualties of all kinds, deaths and wounds, we find there was a better state of health and a lower rate of mortality among the troops forming the expedition in China than usually exist among troops in tropical climates in a time of peace, the success of the sanitary measures that were adopted is beyond dispute. (Hear.) There was a time when hostile critics said of English expeditions, that we could always obtain fighting men, but we could not find a general to lead them, nor a staff to direct them, nor a commissariat to feed them, nor a Medical staff to cure them; but I say that

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Sir Hope Grant's army has given the lie to all those assertions."

Again there have been seizures of diseased and unwholesome meat in the City. The carcase of one calf was seized, which, from the immature formation of its hoofs, Dr. Letheby declared either to have dropped as an abortion, or to have been cut out of a dead cow.

A numerously-attended meeting of Medical Officers of Health, Engineers, and others interested in sanitary improvement, was held last Saturday, to consider the subject of the entry of sewer-air into houses, and the means of prevention. The subject was brought forward by Dr. B. Sanderson, by desire of the Vestry of Paddington. Mr. Lovegrove, Mr. Rawlinson, and other Engineers present, gave numerous curious details respecting the movement of air in sewers, and of the frequency with which strong currents of air are found by the sewer-men to be setting from the sewers up the drains of even the best houses, where, of course, they cause annoyance or illness, according to the point of escape. It was mentioned by Mr. Chadwick and Mr. Rawlinson that a great distinction ought to be drawn between house-slops, pure and simple, and the same matter when it has lain festering in cesspools, or old drains, or street sewers. If conveyed rapidly out of houses, and along properly-distributed pipes, the liquid may be delivered to the farmer in an undecomposed and almost inoffensive state: it is when it has been allowed to stagnate and ferment that it developes those offensive gases which fill our present sewers, and are allowed to poison the air of the streets, and which are the real generators of typhoid fever and diarrhœa.

A fine old Medical veteran, Sir William Burnett, late Director-General of the Medical Department of the Navy, died last week, aged 82. We shall prepare an account of his career, which we trust will interest our readers, for an early Number.

ARMY MEDICAL SCHOOL, FORT PITT.

MILITARY SURGERY.

Professor Thomas Longmore, F.R.C.S.,

DEPUTY INSPECTOR GENERAL.

1. A battle is to be fought within twenty-four hours of a given time. Give a sketch of the surgical arrangements necessary for a division of the army, and more particularly describe the duties of the several Medical Officers of a regiment. Value 50.

2. A soldier has received a wound of the chest from a musket ball; the ball has entered a little above the right nipple, and is found lodging beneath the skin at some part of the vertebral margin of the scapula. Describe the principal lesions which may have been caused by the projectile in its passage, and the guiding symptoms of each. Value 75.

3. What injuries and what circumstances in warfare particularly lead to the development of pyæmia? Value 25.

4. An Assistant-Surgeon is ordered to go in Medical charge of troops in a ship proceeding from Gravesend to Calcutta. What are his duties before, during, and at the end of the voyage? Value 50.

5. Describe the system of dieting ordered by the military regulations for military Hospitals in time of peace. Mention the names of the several diets in the scale. State the composition of any one of them. Value 50.

PRACTICAL EXAMINATION.

Make an examination of the case of ——. Twenty minutes are allowed for the examination. Written notes may be taken.

You are required to write concisely a history of the case, your diagnosis, prognosis, the probable effects of treatment, and the influence of the disease (or injury) on the man's fitness for service as a soldier. Half-an-hour will be allowed for this description.

PATHOLOGY.

Professor W. Aitken, M.D.

1. Describe the more immediate and subsequent effects of malaria on the human subject; the morbid conditions which are brought about upon the spleen, the liver, and the blood; and the kind of influence exercised on the condition generally by a prolonged exposure to malaria. Mention the earlier symptoms which indicate the establishment of the pernicious influence, and give any one example demonstrating the persistent character of these influences, and how they showed themselves in the particular example you may cite. Value 75.

2. Describe the structure of the mature ovum of the tapeworm; state the part of the tapeworm colony in which the ovum reaches maturity; describe the stages of its subsequent development, and the dangers which may attend the existence of tapeworm colonies in the human subject. Value 60.

3. State what is known regarding the source and development of the dracunculus; describe the lesions in the human subject to which it may give rise; and state the regions of the world in which it is endemic. Value 55.

4. Describe the lesions of the intestine in cases of acute dysentery; and state the circumstances which are apt to render cases of dysentery complex, and the nature of the lesions which may then ensue. Mention the points in the morbid anatomy of dysentery regarding which more exact and extended information is desirable. Value 60.

PRACTICAL EXAMINATION.

1. Examine the ova from the segments of the tapeworm, and demonstrate the distinctive characters. (20.)

2. Demonstrate the elements of muscular tissue and of cartilage. State shortly the best mode of preparing muscular tissue for examination. (35.)

3. Demonstrate the villi of the intestine, and indicate the morbid state. (40.)

4. Demonstrate the lobules of the liver, and indicate the morbid state in the specimen. (40.)

5. Demonstrate the structures found in the cortical substance of the kidney, especially the epithelium, the tubes, the basement membrane, and the Malpighian bodies. (60.)

6. Demonstrate the mucous tubes of the stomach, and state the kind of medium in which epithelium is best examined. (20.)

7. Delineate (in outline only) any of the objects examined: (1) judging of the size by the eye alone; (2) using the camera and appending the scale which indicates the relative magnifying power used in the observation. (35.)

8. Determine the magnifying power of the lens in the large microscope on the table (1) with the long eye-piece, (2) with the short one. (60.)

9. Describe any of the lesions in any one of the specimens on the table. (35.)

HYGIENE.

Professor E. A. Parkes, M.D.

1. What is the mortality of the British soldier at home as compared with adults of the same age in civil life? To what causes is the mortality owing, and what measures would you suggest for prevention? Value 80.

2. If you were sent into a district to examine into the quantity and quality of the water of a certain spot, where it was proposed to encamp 10,000 men for a month, how would you proceed to get the information you required? What arrangements would you adopt to purify the water if it contained organic matter from peaty or marshy soils? Value 70.

Note.—Do not enter into chemical details, but state generally your mode of procedure.

3. What effect have soil and configuration of ground on health? Value 40.

4. What are the chief sanitary duties to be carried out in a camp? Value 60.

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PRACTICAL EXAMINATION.

1. *Water.*—Determine the amount of magnesia by the soap-test. Calculate as chloride.

2. *Vinegar.*—Estimate the amount of acetic acid. Is sulphuric acid present?

3. *Lime-juice.*—Estimate acid as hydrated tartaric acid. Examine for sulphuric acid.

5. Microscopic examination of the specimen [adulterated coffee].

N.B.—It was proposed to have an oral examination for those candidates who failed to satisfy the Examiners at the written and practical examinations, but it was not found necessary to hold one.

ROYAL COLLEGE OF SURGEONS.

HUNTERIAN ORATION, BY MR. COULSON.

We expressed last week our intention to give some extracts from Mr. Coulson's excellent Hunterian Oration, and do so accordingly. Mr. Coulson commenced by lauding the pious reverence of Hunter's genius which led to this anniversary gathering "amid the works of his hands and the fruits of his labours, there to pay genius its due homage, to hold forth a great example, to incite and to instruct." He gave a rapid sketch of Hunter's life and labours, and analysed the character of his mind, emphasising the evidence of his power of generalisation, his faculty of comparison, his accuracy of observation, his marvellous activity and industry. After summing up the results of Hunter's labours, of which the greatest was "a demonstration that organised creation has been formed on a single plan or type, which may be traced throughout the whole animal world, and that the lower animals represent permanently the successive stages through which higher animals pass until they have attained their full and perfect development," Mr. Coulson discussed the theories of vitalism, and continued thus:—

"Having thus considered the leading characters of Hunter's mind, and the principal results of his labours, it is only becoming that I should make some allusion to the task which has devolved on the Council of this College, and to the manner in which the important duties entrusted to it have been fulfilled. We have become the guardians of the Hunterian Museum—that magnificent epitome of organised nature; in which the multifarious and complex phenomena of life are illustrated by a most perfect display of the organs concurring to their production; in which diseases are traced to the primary changes connecting them with natural conditions; in which the plan of the Supreme Architect is revealed in all the greatness of its unity; in which, also, are preserved the earliest traces of that sublime Science which connects the history of the present world with the worlds which have passed.

"Sixty years ago, Hunter's Museum fell into the hands of the College of Surgeons, and since that period the Council has never ceased to preserve and enlarge it, and to render it more and more intelligible to all.

"John Hunter spent £70,000 on the original collection, for which the Government gave £15,000. In 1806 another sum of the same amount was granted to the College towards the building fund, the rapidly increasing additions to Hunter's original collection having caused a corresponding demand for exhibiting space. In the following year a further vote of £12,500 was passed for the same purpose; and finally in 1852, the College obtained a grant of £15,000, raising the sum total contributed by the nation towards the support of the Museum, to £57,500. In addition to this, the Council of the College, since the year 1835, has devoted £60,000 to the improvement of the various departments of the collection; so that the entire sum hitherto expended, amounts to £118,000, an estimate which, it will be observed, does not include the expense of keeping up the Museum. This is borne wholly by the College, which has not expended less than £100,000 for this purpose.

"The increase of the Museum, partly by purchase and partly by contribution, but mainly through the industry of our own Conservators, has been prodigious. The number of preparations constituting the collection at the time of its purchase by the Government, was 13,682, the great majority of these having been made by Hunter's own hands. Since that time, numerous additions have accrued to every division, and the total number of preparations at present in the Museum, including the microscopical collection of 16,000 preparations, which we owe to our indefatigable Curator, Mr. Quekett, is no fewer than 44,700. So much for the manner in which the College has discharged the duties which devolved upon it, in immediate connexion with the Hunterian Museum.

"It now remains for me to speak of the controlling influence which has been exercised by this Corporation upon Surgical education. With the labours of John Hunter, commenced a new era in Surgery, for from his time it dates its existence as a science. Professional education,—the control of which was entrusted by public consent to this College,—thenceforward assumed a more important rank and required to be directed into new channels. The task was great and noble. The duty has been faithfully and efficiently performed. We have kept pace with the progress of the age, bearing steadily in view and endeavouring to reconcile with each other, the advancement of science, and the true interests of the Profession and of the public.

"If Surgery be a science, it must enter that circle which embraces all sciences and connects them together, establishing a fundamental relation which renders the progress of all dependent one on the other. And such connexion, such mutual dependency or relation, must necessarily exist, for in reality there are not many sciences, but one, viz. a knowledge of the causes of those various effects which are produced around us. Where the effects, then, are so numerous and so different from any others with which we are familiar, while the causes are so obscure, where such a wide field is open to conjecture and error, while the measure of connexion is so narrow and confined, it is obviously our duty to fortify the mind against its own failings, to strengthen Reason by early discipline, and to ensure so far as we can that her powers shall not be wasted in the pursuit of vain shadows and empty speculations.

"This discipline a liberal education, in its most extensive sense, can alone bestow. The education thus desiderated, will shortly be required as the preliminary discipline of all who strive to obtain the diploma of the College.

"If an enlarged and liberal scheme of education be a necessary foundation for Professional science, if the status which we are to occupy in society must depend in great measure on our acquaintance with those *litteræ humaniores* which are cultivated by the members of every other liberal profession, then has the Council of this College done wisely in ordaining that the Student shall commence his career by a course of study, similar to that pursued by the gentry of this land and the professors of other liberal sciences.

"This principle, long since voluntarily adopted by the College, has recently been sanctioned by law. But let it never be forgotten that, although honoured by Royal Charters, the existence, prosperity, and influence of this College have not been owing to legislative protection, but are the fruits of public confidence—freely bestowed, because fairly merited."

DENTAL APPOINTMENT.—Mr. J. Cox Smith, an active member of the College of Dentists (who has on principle objected to dental certificates issued by any foreign body), has just been appointed Dentist to the Government Hospital of Fort Pitt, Chatham.

ON THE INFLUENCE OF MENSTRUATION AND PREGNANCY ON THE QUALITY OF THE MILK OF THE HUMAN FEMALE.—In the *Chicago Medical Examiner* for October, Professor N. S. Davis has an article upon the above subject. We give a conclusion or two, without quoting the facts from which those conclusions are deduced. Professor Davis says, "From all the foregoing facts and analyses, I am led to infer that the occurrence of pregnancy during the ordinary period of lactation, either speedily reduces the quantity of milk secreted, or lessens the proportion of solid or nutritive constituents to such a degree as to render it insufficient for the proper nourishment of a child over six months old. In a small proportion of cases, however, the milk secreted continues abundant and of good quality, but the health of the mother rapidly declines; while in a still smaller proportion of cases, the mother and child both continue well-nourished and healthy."

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REVIEWS.

A Treatise on Fever; or, Selections from a Course of Lectures on Fever. Being part of a Course of Theory and Practice of Medicine, Delivered by Robert D. Lyons, K.C.C., M.B. T.C.D., Physician to Jervis-street Hospital, etc. 8vo. Pp. 473. London: 1861.

We wish we could write unqualified praise of Dr. Lyons' book. The advanced Practitioner, whose views of the pathology of fever have been consolidated by observation and experience, may doubtless read it with profit, but it is not a work which we should place in the hands of a student to whom we might desire to impart distinct ideas about the nature and characteristics of the specific fevers. And our reason for this opinion is, that while, on the one hand, the book bears intrinsic testimony to much original inquiry, that portion of it which affects to be systematic, which would naturally and properly form the basis of all instruction which the Professor would impart to his pupils, strikes our mind as deficient in clearness both of doctrine and arrangement. We shall have an opportunity, in the course of our remarks upon the volume, of illustrating what we mean, and shall therefore proceed to lay before our readers a brief summary of what they may expect to find.

Dr. Lyons tells us, in his Preface, that his object in publishing these selections from his lectures is "to bring within the reach of the student and junior Practitioner in a convenient form the more recent results of inquiries into the pathology and therapeutics of this formidable class of diseases." After two introductory Chapters, historical, statistical, and (in a "general" sense) pathological, we arrive at his "classification" of fevers, which he divides into Primary, Irritative, and Eruptive – the first class being the subject of the book under our notice. The primary fevers he divides into Continued, Intermittent, and Remittent, following thus an arrangement which no one can quarrel with. With the exception of yellow fever, which he places among the remittents, the continued fevers alone are treated of *in extenso*.

We have, then, group "(*a*) Continued Fevers;" synocha, synochus, typhus, and typhoid being the forms which Dr. Lyons recognises. And it is here that we begin to find ground for complaint. We do not grumble at Dr. Lyons adopting an antiquated, and, as we have long regarded it, an exploded division of fevers; for he has certainly a right to recognise synocha and synochus, if, as he says, he is satisfied that they do exist as distinct forms of disease; but that he throws in the path of the Medical student a stumbling-block which we had hoped recent pathology had for ever removed. Nothing puzzled us more in our early student days, and before we had observed for ourselves, than the endeavour of systematic writers to group all these fevers together as varieties of one disease, the leading characteristics of which were laid down systematically in one page of our text-book and contradicted seriatim in another, that other being the one which treated of each variety in its turn. Surely this was a difficulty which others must also have experienced, and we regret to find that Dr. Lyons perpetuates the offence. Chapter 4 is headed "Simple Continued Fevers," but is mainly a disquisition on synocha, into which he interpolates remarks on diaphoretics, purgatives, and diuretics in "fever," sufficiently confusing, we should think, to his junior pupils; and this is succeeded by a Chapter on Synochus—we should rather say part of a chapter, for the idea of synocha still seems to prevail. The Chapter is entitled, "Varieties of Synochal Fever," and here synochus is despatched in the space of half-a-page, albeit honoured with special mention in Dr. Lyons "Classification" of Continued Fevers. We had expected some light and life to be imparted to this exhumed disease by our author; but in place of this, and as if to make up for our disappointment, he passes off into an account of Relapsing Fever—a disease we should have thought quite worthy of a place in his "Classification." The mode in which relapsing fever is introduced is characteristic. Having despatched synochus, he writes:—

"Amongst the minor types of continued fever we may notice the affections known as febricula and ephemera, and also the mild form of febrile action called into existence by the effects of the inhalation of such odorous particles as those emanating from newly-mown hay, and hence designated 'hay fever.' . . . . It (hay fever) may last two, three, or more days, and I have known it assume the form of a relapsing fever."—P. 103.

And forthwith comes a heading "Relapsing Fever." Dr. Lyons enters his "protest against the statements recently circulated on very insufficient data that relapsing fever constituted the large majority of the cases of the famine-fevers of Ireland," and says he "can certify that the maculated typhus was the disease which chiefly prevailed."

And now comes Chapter 6, on "Typhoid Fevers," which in its matter and arrangement puzzles us completely. First of all, Dr. Lyons tells us that all the fevers "in the typhus category present certain striking features in common, namely, early prostration if not collapse of the system, a peculiar dusky appearance of the skin, a semi-livid state of the countenance," etc. etc. . . . . and adds that, "the term 'Typhosis' may be introduced to embrace the very well-marked groups of morbid phenomena above described." Then immediately there is a heading "Typhosis," the "various forms" of which he enumerates as typhus, typhoid, the typhoid state which attends some local diseases, the secondary form of cholera, and the general typhoid condition which attends erysipelas, phlebitis, and pyæmia. Surely Dr. Lyons does not mean to tell his pupils that these conditions have all a proper place in a Treatise on Primary Fevers, or that typhoid fever is early marked by the striking features which he has enumerated as those of the "typhous" state. But we have scarcely time to answer this question to our satisfaction before we find him, without any warning, sliding off into a discussion of the characteristics of "Typhus or Spotted Fever." All this must have been very confusing to his pupils, if the arrangement of the book at all resembles that of the Lectures of which it professes to be a selection.

In fact, as we proceed in reading Dr. Lyons' book, the idea grows up and becomes more and more confirmed in our mind, that we have got hold of an embodied anachronism: that while the later chapters on Typhoid and Yellow Fevers are the product of recent research, the earlier chapters must have formerly constituted a portion of a course of lectures of his, written some fifteen or twenty years ago, and which have been patched and amended at various periods since, by the introduction of modern innovations which he has endeavoured to dovetail with the original text. In what other way can we account for his telling us at page 44, "that the relation of the enteric lesion to the [typhoid] fever is certainly not that of cause and effect; nor again is the connexion proved to be of an absolutely constant kind,"—and at page 179, that the follicular lesions are developed "with such constancy, as shown by the results of numerous investigations, that it is impossible to resist the conclusion that the lesion of the intestine is part and parcel of the disease, if not the cause of some of its principal phenomena." How else are we to account for his introducing "delirium ferox" in his description of typhus, in place of deferring it to the Chapter on Typhoid; or to his quoting Louis' observations on typhoid at page 160, when discussing the changes of structure noticed after death from typhus.

We have dwelt upon these prominent defects in the book, because they damage it for the use of those persons for whom it was professedly designed. But we wish to act fairly by our author, and although we have little more space left for our review, to say something in his favour. His Chapters on Typhoid Fever are excellent, and are enriched by an abstract of his Report on the Pathology of the Diseases of the Army in the East during the last Russian campaigns, together with a long and valuable series of illustrative cases. Dr. Lyons very properly draws attention to the great danger which attaches to premature indulgence of the appetite, and premature return to the habits of health in convalescence from this disease.

"We have seen, from pathological anatomy, how deposit in the solitary and aggregate glands, to a very large extent, may remain quiescent for a long period. It is presumable that in many such cases, with judicious management, the gradual elimination of the deposit might have been brought about without the induction of ulcerative action in the intestines. Incautious exposure, premature exertion, and the use of food and drink of irritative quality, insidiously light up inflammation around the follicles and patches of Peyer. This process localised for a time, sooner or later re-acts on the

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system, and secondary fever of a slow and obscure kind is developed, with subsequently pain and distension in the abdomen, diarrhœa, bloody stools, tympanitis, and, it may be, perforation of the intestines and fatal peritonitis."—P. 292.

Chapter 9, on Yellow Fever, and Chapters 10 and 11 (supplementary), on the Pathological Anatomy of the Yellow Fever of Lisbon (1857), to which last is appended a table of illustrative cases, constitute a valuable monograph upon this formidable but interesting malady.

Only one word more, however, before we part with Dr. Lyons. In various parts of his volume we meet with the names of German, French, Irish, and now and then Scotch observers; but the names we do *not* find, are those of Stewart, Jenner, Murchison, Parkes, with some others of English notoriety, the accepted regenerators of the Pathology and Nosology of Continued Fever. How is this?

FOREIGN CORRESPONDENCE.

MALTA.

MALTA, February 6.

A COURT-MARTIAL has been recently held upon Dr. Monteith, late Surgeon of the *Melpomene*, and has pronounced its verdict to the effect that the Surgeon of the *Melpomene* was to be "severely reprimanded and dismissed his ship." The charges against him were,—negligence in sending men to duty before they were fitted for it, and inhumanity in the exercise of his duties. If it be a well-recognised duty to bring a Medical man to a Court-martial for charges of this kind, and to visit them with the severest sentence if proved, it is certainly no less the duty of everyone to animadvert in no measured language, upon an ill-considered institution of proceedings, grounded upon frivolous and vexatious charges, and ending in an unjust and severe exercise of power against an old and deserving officer.

That the proceedings and sentence of the late Court-martial come under the latter category, there can, I think, be no doubt whatever. All those who heard the evidence were surprised at its frivolous nature, and it was generally and strongly felt, indeed, that there was none of a reliable nature to support the charges against Dr. Monteith. Had the case been investigated before any civil tribunal, not only would Dr. Monteith have been honourably acquitted, but we are assured that the whole thing would have been indignantly dismissed as vexatious and frivolous. Dr. Monteith might have protested with perfect justice against the Court-martial as regards his professional conduct, by simply stating that he acted to the best of his judgment, and that he was a duly and legally qualified man, and that none but professional men either could or should be permitted to prove him wrong.

When the sentence was known, indignation and surprise were prevalent in the minds of all Medical, and a very large number of the executive officers of the Mediterranean fleet. Dr. Monteith was a valued and respected officer in his ship, and that he met with the greatest sympathy from his brother-officers is well known. The fact is, the late Surgeon of the *Melpomene* and his Captain had frequently come into collision in the exercise of their duties; and however much it was felt that Captain Ewart was wrong, however strongly the evidence told against the discipline of his ship, and against his want of decision and judgment, the Court, we suppose, felt that some one "must be hanged," and generously, if not justly, spared a member of their own body and sacrificed the Doctor.

It is only due to Dr. Monteith's character, that a short epitome of the facts should be frankly, honestly, and in good faith, laid before the Medical public; and it is equally due to those who are thinking of entering her Majesty's Navy, that they should be well aware what rewards they are likely to meet with after eighteen years' honest service.

In the first place, it ought to be known that such evidence as was produced was composed of men who were at once prosecutors and witnesses. An interval of between two to four months intervened between the time of the circumstances complained of having taken place, and the period of their reporting them to the Captain. Even then, whilst upon the quarter-deck, one of the witnesses answered his Captain affirmatively, upon being asked the third time as to any complaint, and then only at the suggestion of a petty officer. That the seamen sent to "partial" duty by the Surgeon, really had "ordinary" duty, and were exempted from a part, or a whole of it, by petty officers—is true; but it is equally true that the Senior Assistant-Surgeon reported to the First Lieutenant that such men were to have partial duty.

The cases were generally of one kind, viz. acute dyspepsia and hypochondriasis, the direct or indirect result of debauch. The Surgeon, after treating them for some time, ordered them partial duty, and to attend thrice daily at the sick bay for medicine, upon the following grounds: First. That such cases not only do not improve in Hospital, but get worse, owing to the confined air, want of exercise, and association with sick comrades, and that convalescence was more rapidly achieved by the open air, and the physical and mental exercise connected with a partial discharge of duty. These reasons were absolutely explained to the men themselves, and the Surgeon's proceedings met with the sanction of the two Assistant-Surgeons, and the appearance of the men did justice to the judgment of such a course. Secondly. That there are many duties on board ship which such men can perform with benefit to themselves and relief to their messmates. Almost every Medical man (particularly in the Naval and Military Services), is aware that for cases of this nature, a protracted stay in Hospital is actually injurious, while air and exercise are in themselves curative.

The witnesses for the prosecution gave their evidence to the effect that the men were not well, and unfit for this or that, or any duty; while the Medical men said they were fit for certain duties, which they defined.

One case occurred which was particularly dwelt upon, both by Court and witnesses, as a proof of the Surgeon's negligence and want of skill. A seaman attended a few days at the sick bay with slight gastric symptoms, followed by catarrh. Upon the appearance of the latter, the man was admitted, and eleven days afterwards died. An autopsy proved what had been surmised from the sudden appearance of collapse, about twelve hours before death, that ulceration and perforation of the ileum existed. It was, doubtless, a case of latent enteric fever, by no means uncommon here. The Medical witnesses swore that the man, (up to the period of the sudden accession of collapse, and abdominal pain,) suffered in a trifling degree from bronchitis, and presented no symptoms by which they could diagnose intestinal ulceration. Some Professional men proffered the evidence of their knowledge and experience as corroborative of this, but the five Post Captains evidently did not credit it, and went deeply into the question of treatment of enteric ulceration by quinine, etc. In point of fact, the Court got into the most terrible confusion upon questions of Pathology, and although Medical gentlemen present in the Court volunteered evidence upon certain points, and put themselves before the Court for any questions that might require elucidation, the Court, we presume, felt so certain of their unerring wisdom, that they did not require any guidance, and as by the rules, no evidence is given save in answer to questions, Professional men had to maintain silence upon matters upon which they alone were qualified to judge. The prisoner and his friends considered the whole case so self-evident and favourable, that they never doubted a verdict in their favour, and hence they evinced no desire to protract an enquiry which had already consumed so much time.

The last case was one of a drunken sailor who had dislocated the left arm at the shoulder-joint; and here there did seem to be an error in judgment upon the part of the Surgeon, or we ought rather to say, the evidence that this man was officially exempted by the Surgeon from the performance of his duties was not so clear as it might have been. He was discharged from Hospital upon the eighth or ninth day after the reduction, with his arm secured in a sling, and the Surgeon told him he would not be required to go aloft, or pull in boats, etc. Within seven days of such discharge, it was proved that the man went on shore and got drunk, and was confined the whole night in the main guard. Tho petty officers ordered the man duty, and exempted him from it, without any reference to the executive or Medical officers.

These were the charges attempted to be proved, and during the trial every by-stander thought there was not a tittle of evidence on the part of the prosecution, and proceeded to congratulate the prisoner. It was generally felt

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and expressed that Captain Ewart was in an awkward position, and that the numerous facts bearing upon the lax discipline of his ship (which had leaked out during the trial), must call forth the severest reprehension upon the part of the Court. When it was found that the Medical evidence was one and all in favour of the prisoner; that the evidence of the executive officers was as strongly so as evidence could be; when the Assistant-Surgeons, and sick-bay men, the sick berth attendants, and half-a-dozen seamen and marines (out of a long list) spoke to Dr. Monteith's uniform kindness and attention, and the prosecution had failed to establish one single charge of harshness (even a harsh phrase or expression); when the strongest evidence to support such a charge (on the part of a very jolly-looking tar), went only so far as to characterise his manner as "sharp;" but at the same time to allow that it was the same, whether to his messmates, Assistant-Surgeons or his patients, the whole affair was looked upon as simply a ridiculous and vexatious trial. Captain Ewart stated that "he was a more than usually conscientious man, and that he never desired to have a more zealous or attentive Medical officer." The First Lieutenant said: "The charges, in his opinion, were frivolous and vexatious." The Assistant-Surgeons said "that they concurred in almost all that their Surgeon had done," and spoke in the highest terms of his uniform attention and kindness. The sick-bay men and many seamen did the same. A military officer testified that upon several occasions Dr. Monteith had declined to go out for a walk or dine with him on account of his having sick men in whom he was very much interested, and that they required watching, and stated also that this evidence was purely voluntary on his part. Evidence was produced to prove what every member of the Court well knew, that partial duty was ordinarily recognised everywhere in the service. A very old officer of much experience has assured me that it is a recognised principle that the Surgeon should keep as few men in the sick bay, and as many at light duty, as he can consistently do with justice to the cases under his care. It was also shown that the only fatal case during Dr. Monteith's connexion with the ship was the one of perforation alluded to. The evidence extended over so large a space that it is impossible to forward you a summary of it, but the result ought to be well known and wide-spread, and coupled with words used by a gentleman whose character is above reproach, and who has had some experience of the Service generally, and Dr. Monteith in particular. "If they desired to single out a truthful, conscientious, and zealous Medical officer to try by court-martial, and ruin him by an unjust and ridiculously severe verdict, they have succeeded."

It must not be forgotten that the witnesses for the prosecution had free communication one with another during the trial. The Surgeon protested against this, but at the same time feeling that he had everything to lose by the non-continuance of the trial, urged that no mere technical or legal advantage was desired on his part, but that his conduct should be fully investigated upon its own merits. To show the character of the witnesses we would remark that when two or three of them were called by the Court, and questioned as to whether they had conversed about the trial, they one and all denied it! Now, what is the plain inference when witnesses at a trial were seen talking together while the proceedings were continuing? That they did talk of it, certainly! There are some who can only account for the verdict by supposing that it was a species of pandering to the public cry of "How to man the Navy?" A Surgeon is nothing henceforth on board ship, and any Naval Surgeon would be justified in refusing to permit any man to be discharged from treatment without an express order from his Captain. If the Service is to be rendered popular by sacrificing Professional men who are conscientiously striving to act with a due regard to their patients, and the exigencies and good of the Service, then it had better be plainly stated so. The effect of all this upon the discipline of Her Majesty's Navy must be baneful in the extreme. To the Medical Profession, as a body, a Naval Court-martial will be regarded as a facile and gratuitous mode of insult. If, in defiance of all rule and logic, the evidence of tars upon special questions is to be held in estimation above that of men specially educated in such matters, and the judges are to be constituted of a class necessarily as ignorant of the matters under examination as the commonest able-bodied seaman of Her Majesty's Navy, and with the prejudices which Post Captains generally entertain with reference to the social and professional position of Medical officers, then the Naval Medical Department had better be abolished at once, and the commander of every vessel (becoming in reality the little god he fancies himself) allowed to treat and cure, as well as command, the crew he has under him.

The middies endeavoured to evince that respect for their brother officer which he had failed to obtain from his superior officers, by manning the gig that conveyed their unfortunate, but in no wise disgraced, messmate away from his ship. Should this meet Dr. Monteith's eye, let him bear well in mind that his character, be it professional or personal, with a large majority of right-thinking men remains unblemished by any stain of dishonour, spite of the Court-martial.

GERMANY.

Driburg, February 10.

The existence in this place of mineral springs, which contain a large amount of free carbonic acid and bicarbonate of iron, is well known, and they have for centuries been somewhat extensively used for the cure of diseases; but the arrangements for bathing have, until lately, been so faulty, that it is only since 1858, when the new "Badehaus" was erected, that the importance of our springs has been fully acknowledged. In this "Badehaus," arrangements have been made to heat the water, which is naturally cold, by means of steam, so that its chemical composition is as little altered as possible; now the water in which the patients bathe contains only one-fourth less of carbonic acid than the water of the spring itself, while formerly, when large quantities of common boiling water were added to heat it, much more of the gas was lost. There are only a few springs in existence which possess just the temperature suitable for bathing, viz. 76° to 86° F.; and therefore the water of cold springs requires to be heated, and that of warm springs to be cooled. This heating or cooling process essentially alters the condition of the water. If Thermal waters, which contain sulphuretted hydrogen, are cooled down in a special reservoir, from 120° or 130° to 76° or 80° before they are used, it is found that the gas has quite disappeared; and the same is the case if water, which when cold, contains carbonic acid and sulphuretted hydrogen, is boiled. The only way to render such changes as trifling as possible, is to let the *hot* water directly into the bathing tubs, and there to add common cold water to it; while the water which is naturally *cold*, ought to be gently heated by means of steam.

Last year M. Wiggers, Professor of Chemistry at the University of Göttingen, was requested by Baron von Vincke, who is the greatest landed proprietor in this neighbourhood, to make a fresh analysis of the springs of Driburg, which had not been analysed since 1854, and to compare the amount of gases and minerals found here with those of other carbonic acid and iron-springs. The result of this analysis showed, that there is no mineral water in Europe, which contains so much of these two important elements as that of Driburg, while the springs of Pyrmont, which were formerly believed to be the richest in these elements, approach nearest to it. According to this analysis one pound (7680 grains) of our mineral water contains:—

Free carbonic acid	17·1343 grains.
Bicarbonate of iron	0·7862 ,,
Bicarbonate of manganese	0·1094 ,,
Bicarbonate of lime	14·8911 ,,
Bicarbonate of magnesia	0·5305 ,,
Sulphate of potash	0·0822 ,,
Sulphate of soda	7·9688 ,,
Sulphate of magnesia	4·7810 ,,
Nitrate of soda	0·0048 ,,
Chloride of sodium	0·6982 ,,
Chloride of lithium	0·0189 ,,
Sulphate of lime	10·1571 ,,
Silica	0·0234 ,,
Alumina	0·0619 ,,
Sulphuretted hydrogen	0·0004 ,,
Arsenious acid	0·0002 ,,
Water	7622·8208 ,,

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While the springs of Pyrmont only contain 15·41 grains of carbonic acid, 0·58 grains of bicarbonate of iron, 0·04 bicarbonate of manganese, and no sulphate of soda whatever.

The chief point of interest in this new analysis is the discovery of the presence of the bicarbonate of manganese, which had not been found in 1854; as the experience of Hannon, Kletzinski, and others has proved, that in certain cases of anæmia, which the preparations of iron fail to benefit, the manganese is able to effect a cure. The sulphuretted hydrogen, which had not been found formerly, does not seem to be of any importance, as the quantity is very small and not even always the same; but it is possible that the small amount of arsenious acid, which is invariably found in the same quantity, may have some effect in the cure of certain disorders; while the sulphate of potash, which is not found at Pyrmont, is in so far important, as it, together with the carbonic acid, counterbalances the effect of iron in disturbing the digestion. Although the use of iron springs is in most cases much more easily borne by the digestive organs than the pharmaceutical preparations of iron, still after having been taken for some time, they often produce obstruction and acute catarrh of the stomach, or exacerbations of the indigestion, which generally accompanies chlorosis. Here, however, such effects are seldom observed, as our springs almost always agree even with the weakest stomach and sometimes cure certain forms of indigestion.

The carbonic acid baths, which are very much employed in this place, are so strong, that in the majority of cases it is necessary to dilute them with fresh water. They are generally taken at a temperature of 86° to 88° F., and only seldom as low as 77°; in the latter case the patient feels a sensation of burning in the skin and an internal chill. Patients generally sit in these baths for about half-an-hour. As soon as they are immersed in the water the whole surface of the body becomes thickly covered with bubbles of carbonic acid gas, which are in constant motion; and, if wiped off, they immediately reappear. The acid produces a feeling of pricking and heat in the skin, which, on the scrotum, the back of the hand and of the forearm, on the face (when immersed), on the nipples, and the labia, amounts to a burning sensation. The more carbonic acid the water contains, the more pleasant is this "champagne-bath" to the patient. If the patient sits quite motionless in the bath, the burning sensation is comparatively stronger, as the bubbles of gas remain in closer contact with the skin; but if he moves about, a feeling of cold is perceived; and in some cases this continual change from cold to heat appears to be of great benefit. The skin becomes quite red in the bath, and many persons feel the burning sensation for several hours afterwards. In males, even in such as are past the prime of life, the effect produced upon the genitals is very strong. The baths have also a remarkable effect upon the bladder. The same patients who could sit in a common warm water-bath for half-an-hour without feeling an inclination to pass the urine, are compelled to do so after having been immersed for a few minutes in the carbonic acid bath. The inhalation of the gas, which, of course, takes place in the bath, is not so unpleasant as might be supposed; the carbonic acid not being sufficiently concentrated to be able to extinguish a candle floating on the water; but if sensations of vertigo, oppression, etc., are perceived, it is merely necessary to stand up in the bath now and then, and to breathe the pure air in the higher strata of the atmosphere, to get rid of them.

The immediate effect of the bath is generally a feeling of increased power in the limbs; and semi-paralytic patients are observed to walk briskly afterwards. The effect is especially marked in females suffering from hysterical paralysis, and even in the commencement of atrophy of the chord amelioration may be produced; while in cases of longer standing, in which the nervous matter is changed into "veritable starch," of course no good can be expected.

Most of the patients sent here suffer from the different forms of anæmia and its consequences; and although this disorder is more common among females, we not unfrequently see cases of males, in which the wear and tear of mental labour and anxiety produces a completely anæmic state of all the organs. Such cases are almost always greatly benefited, especially if the patients at the same time avoid any excitement of the brain. Even if a constant drain on the system takes place, as in Bright's disease, temporary beneficial effects are sometimes observed. In 1859 an interesting case of this kind occurred in the practice of the "bade-arzt," Dr. Brück, which I will briefly mention. The patient, who was between fifty and sixty years of age, had been addicted to the use of intoxicating liquors, but, after having had two apoplectic fits, had quite given it up. He arrived at Driburg quite exhausted by the fatigue of the journey and in a somnolent state, with headache and vomiting, so that a few days of absolute repose were necessary before any opinion could be given upon the propriety of prescribing the use of these waters. He quickly recovered, however, by the use of the baths, together with cold fomentations to the head. The urine, which at first contained 4 per cent. of albumen, after ten days showed only 0·2 per cent., and after a month was perfectly normal; at the same time the general health of the patient was wonderfully improved. On his return home, work and anxiety caused a relapse, and six weeks afterwards he came back to Driburg, complaining of headache, sickness, spasms in the calves, and albuminuria. He now again recovered rapidly, and after having taken seventeen baths, his appetite had so remarkably increased that he was induced to partake of a very hearty dinner; and half-an-hour afterwards he was seized by a fit of apoplexy, which proved fatal.

In cases of amenorrhœa and leucorrhœa caused by anæmia, our baths generally effect a cure; but in hyperæmia of the uterus, especially in weak persons, they often induce hysteralgic symptoms to such a degree, that they have to be discontinued. Last year a patient of strong constitution came here, who suffered from retroflexion and tumescence of the uterus, and consequent imperfect paralysis of the lower extremities, and who had tried every remedy, without benefit; in this case the use of the baths had the best effect, not only in diminishing the paralytic symptoms, but also in improving the position of the uterus. Anæmic patients suffering from epilepsy are now and then sent here, but they never improve; on the contrary, in most cases the fits increase in severity, even after a very cautious use of the waters.

Our carbonic acid baths have, in some instances, produced a most marvellous effect upon females disposed to give birth to monsters. Quite recently Dr. Brück had a lady under his care whose general health was perfect, and who in her first confinement was delivered of a microcephalus. Being *enceinte* for the second time, she took the baths at Driburg, and afterwards gave birth to a healthy child; in the third pregnancy she neglected the baths, and was again delivered of a microcephalus. When pregnant for the fourth time she came to Driburg, used the baths, and a healthy child was the consequence. It seems almost incredible, but still it is a fact, that, being *enceinte* for the fifth time, she did not think it necessary to have recourse to that treatment, which had twice proved so eminently successful; and the consequence was, that her former misfortune recurred. Since then she has been a regular visitor here, and her last confinement, which happened in the spring of 1860, was perfectly satisfactory.

It is generally believed that the internal use of our waters proves beneficial from their containing iron and manganese; but Dr. Piderit, of Detmold, has recently advanced the opinion, that the large amount of carbonate and sulphate of lime found in these springs explains in a great measure their success. He says that the most important remedial matters contained in the springs are such as are also contained in the blood. They are "means of instauration," and as such offered to the sick organism, which is in want of them; iron, however, is not the only means of instauration, but sulphur and lime are even more so, as larger quantities of them are required in the body than of iron. If the system is enfeebled by loss of blood, and profuse secretions and excretions; in chronic catarrhs of the lungs, the intestines, the sexual organs, the kidneys; in chronic ulcers, suppurations, albuminuria, and diabetes, iron alone is not a sufficient compensation, but sulphur and lime are also required. The same is the case in pregnancies which succeed each other rapidly, and in which a large amount of lime is necessary for forming the skeleton of the fœtus; also in protracted lactation. Thus the water of Driburg acts chiefly by the solution of gypsum contained in it in the most easily digestible form. Dr. Piderit contends that gypsum-water is not "hard" and "difficult of digestion," as is generally believed. Sixteen grains of sulphate of lime are dissolved

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in one pound of water at a medium temperature; and, once dissolved, it is just as well diffused in the water as the other sulphates. The sulphates are decomposed in the stomach, and sulphide of calcium, of sodium, of potassium, of magnesium are formed. These compounds are very easily soluble, as any acid (lactic acid, carbonic acid, acetic acid, etc.) will combine with them, and set free sulphuretted hydrogen. If it were true that a large amount of sulphate of lime renders the water indigestible, it would be impossible to understand how the springs of Driburg can have the beneficial effect they unquestionably produce. Dr. Piderit has treated a far-advanced case of diabetes with a pure solution of sulphate of lime. The patient, a man fifty years of age, who had suffered for two years from this complaint, and had been reduced in weight from 160 to 112 pounds, took daily five to six pounds of this water, each pound containing sixteen grains, without being in the least inconvenienced by it, and after two months his weight had increased to 123 pounds. He was never troubled by indigestion during the time he took this water. The same Physician mentions the case of a patient, aged 71, who suffered from atony of the stomach and the intestines, indigestion, heart-burn, colica flatulenta, etc., and who took small quantities of the Driburg waters every day for five years, in which time he consumed about twelve thousand grains of sulphate of lime, and his digestion had never been better.

I conclude this letter by mentioning that the internal use of our waters has sometimes induced opium-eaters to discontinue their baneful practice. Quite recently an English lady came here, who had, after severe mental afflictions, contracted the habit of opium-eating, and who was accustomed to take twenty grains of the acetate of morphia in the course of twenty-four hours. She daily drank about one hundred ounces or more of our water, and while doing so did not find it necessary to indulge in opium, which proved very beneficial to her general health; but the year after, in consequence of new family misfortunes, she again took to morphia, and this time the use of the waters did not prove so good a substitute as before.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, FEBRUARY 12, 1861.

MR. SKEY, President, in the Chair.

A Paper, by MR. THOMAS BRYANT, F.R.C.S., was read, entitled

CONTRIBUTIONS TO THE SUBJECT OF COMPOUND FRACTURE: BEING AN ANALYSIS OF 302 CASES.

Having recognised the fact that the science of Medicine and Surgery was one purely of observation, and that its principles and practice could only be regarded as sound so long as they were based on facts, the result of recorded and carefully-observed phenomena, the author went on to state that he believed it to be the duty of every practitioner to communicate to his professional brethren any positive material he may possess, and thus to add his quota in building up the noble art and science to which we have the honour to belong. In conformity with such a principle he had the pleasure of presenting to the Society a brief analysis of upwards of 300 cases of compound fracture of the extremities, omitting only those minor examples in which the smaller bones of the hands and feet were involved, believing that the results educed were not unfruitful either of interest or instruction. The cases were all taken from the experience of Guy's Hospital within the last twenty years, the earlier ones having been collected from the records of the institution, and the author's own notes having furnished him with the particulars of every case admitted within its walls during the last seven years. He then proceeded to the analysis of the whole number—302 cases:—

17 or	5·6 per cent.	were of the	thigh
193 or	63·9	,, ,,	leg
35 or	11·5	,, ,,	arm
57 or	18·8	,, ,,	forearm

11 out of the 17 cases of compound fracture of the thigh proved fatal, or 64·7 per cent. 74 out of 193 examples of compound fracture of the leg were fatal, or 38·3 per cent. 4 out of the 35 cases of compound fracture of the arm died, or 11·4 per cent. And 7 or 11·2 per cent. of the 57 cases of compound fracture of the forearm. Of the whole number of 302 cases, 96 were fatal, or 31·7 per cent. A table then followed showing the causes of death in these 96 cases, from which it appeared that in cases subjected to amputation pyæmia was twice as fatal as in others treated on conservative principles, and that exhaustion and gangrene were more common causes of death; that in cases treated on ordinary surgical conservative principles delirium tremens and tetanus were more common causes of a fatal result. Analysing the 17 examples of compound fracture of the thigh—9 underwent primary amputation; 6 died, and 3 recovered. 1 underwent secondary amputation; fatal. 7 were treated on conservative principles; 4 died, and 3 recovered. 10 were thus treated by amputation, and 7 of these died, or 70 per cent. 7 were left to Nature's efforts for repair, and of these 4 died, or 57 per cent. Having given an outline of the fatal cases, the author went on to remark, first, on the rarity of compound fracture of the thigh, the accident bearing the proportion only of 5·6 per cent. to the other cases involving the larger bones of the extremities. This fact, he stated, was well borne out by the experience of all Surgeons. The excessive mortality of these cases was the second point to which he alluded, 64 per cent. of the whole number of cases proving fatal. In nearly 60 per cent. amputation was had recourse to, and 70 per cent. of these cases subsequently sank. The extreme severity of the majority of these cases, he remarked, rendered primary amputation absolutely essential. He showed that more than half the examples died, or 57 per cent., in which attempts had been made to save the limb; and that the cases in which recovery had taken place were in young and healthy subjects. The author passed on to review the opinions of some military Surgeons on the subject, and pointed out how Dupuytren, Hennen, Larrey, Guthrie, and others all agreed that in compound fracture of the thigh from gun-shot wounds, "in rejecting amputation, we lose more lives than we save limbs;" and also "that in the exceptional cases, which result in consolidation, the condition of the limb is not encouraging." He quoted Macleod's Crimean experience as indicating the same opinion, this Surgeon advising amputation in all such cases when taking place in the middle and lower third of the thigh, and hesitating only in a like recommendation in cases of fracture of the upper third, on account of the extreme mortality of such amputations. Malgaigne's and Bauden's experience was then quoted to prove the poor success of conservative treatment in these injuries, the latter Surgeon saving only 2 out of 25 cases, and these two retained useless and deformed limbs. The author then went on to say that the experience of civil Surgeons was not unlike that of their military brethren, although it was much more limited; and expressed an opinion, which he believed to be generally entertained, that a satisfactory result can rarely be obtained by conservative treatment, except in the most favourable cases,—that is, when the subjects are young and the fracture uncomplicated; when the soft parts are not materially damaged nor the bone comminuted. When the bone was comminuted and the soft parts seriously involved (such a condition being generally produced by local mechanical violence), he believed that a satisfactory termination of the case must be regarded with doubt. If the patient should be old or unhealthy, amputation should be at once performed; and if there should be a doubt as to which line of treatment to adopt, the safest is to decide on amputation. But if the subject should be a young and healthy one, and not subjected to injurious hygienic influences, the author believed that a satisfactory termination might be obtained by removing at once the broken and disconnected fragments of bone (enlarging the wound if necessary), and by maintaining the absolute repose which is so essential. He stated that he believed it to be bad practice to leave the broken fragments in position, with the hope of union; and that by doing so we left a constant source of irritation, which must retard the

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local process of repair, as well as seriously weaken the powers of the patient, a subsequent operation being almost necessarily required to remove what will become necrosed bone.

Analysis of the 193 cases of compound fracture of the leg.

The author commenced by stating that these numbers included fractures of the tibia, and tibia and fibula combined, the latter being the most numerous. Compound fracture of the fibula was comparatively a rare accident. 129 were treated on conservative principles, 35 of which died, or 27·13 per cent. 32 underwent primary amputation of the leg, 19 of which died, or 59·37 per cent. 11 underwent primary amputation of the thigh, 6 of which died, or 55·55 per cent. 15 underwent secondary amputation of the leg, 10 of which died, or 66·66 per cent. 6 underwent secondary amputation of the thigh, 4 of which died, or 66·66 per cent. 74 of the whole number died, or 38·34 per cent.,—27·13 per cent. of those dying which were treated on conservative principles, and 60·9 per cent. of those treated by operative interference. In 22 per cent. primary amputation was performed; in 10 secondary; and in 67 per cent. conservative treatment was adopted. A table was then given, showing the causes of death in the fatal examples, from which it appeared that of the fatal cases operated on, about one-third died from pyæmia, and nearly two-thirds from exhaustion or gangrene. That of the cases treated on conservative principles, not one-sixth die from pyæmia, and something less than half from exhaustion and gangrene,—pyæmia being evidently a more common cause of death after operation. The author then went on to observe, that no comparison can be well drawn between the two classes of cases in which conservative treatment and operative interference had been applied. In compound fracture of the leg, he believed that the injury should be very extensive to warrant such a practice as amputation; for most cases, whether treated by primary or secondary amputation, prove fatal to about sixty per cent.; and when attempts to save the limb are carried out, by care and close attention good results may be anticipated. Let a free exit be made and kept up for the evacuation of all pus; let loose pieces of bone be removed as early as possible; and let the limb be preserved in absolute repose by any splints which will secure such an end. Let the tendo-Achillis be divided if the slightest difficulty is experienced in maintaining rest, and good support and nourishment freely given. Under such treatment, apparently hopeless cases often turn out well, and reward the Surgeon's attention by a successful result. The author then dwelt at some little length upon the necessity of making free incisions whenever pus was present; it was a practice which he had never seen followed by any other than good results, and strongly advocated its adoption in appropriate instances.

Analysis of the 35 cases of compound fracture of the arm.

14 were treated on conservative principles, and all recovered; 4 were treated by primary amputation at the shoulder-joint, 2 of which died from internal complications; 13 were treated by primary amputation of the arm, and 2 died; 4 were treated by secondary amputation, and recovered; 31 of the whole number recovered, and 4 died, or 11·4 per cent.

Analysis of the 57 cases of compound fracture of the bones of the forearm.

27 were treated on conservative principles, and all recovered. 22 were treated by primary amputation of forearm; 2 died, or 9 per cent. 5 were treated by secondary amputation—4 of forearm, 1 died; 1 of arm, fatal. 3 died from internal complications. The author then drew attention to the fact of the favourable termination of these last two classes of cases, which the experience of all Surgeons correctly indicated. He stated that such an operation as amputation should be resorted to only in the severest examples, and that in more favourable cases a good recovery might with some confidence be anticipated. He drew attention to the fact that so large a proportion as about 50 per cent. of the cases of compound fracture of the forearm admitted into Guy's Hospital were subjected to amputation, and explained it by proving that the majority of the cases were caused by machinery, which was too often followed by a total destruction of the part. The author concluded by expressing a hope that the analysis was of some value and interest, although he was well aware that few general deductions could be drawn, as there were no cases in Surgery which required to be treated more upon their individual peculiarities than those of compound fracture.

The PRESIDENT remarked on the great interest of Mr. Bryant's paper, and the importance of the points on which he had accumulated so much evidence. There was one point which the author had not noted, and that was on the comparative results of the more recent and better treatment in comparison with that of ten or twenty years ago. He wished to know if the author could give any information from the analysis of his facts bearing on this point.

Mr. CURLING considered the paper to be one full of instruction and one highly creditable to the author, but he added that statistical papers seldom furnished points for immediate remark. They required some time for digestion and comparison of the cases. There were two points which the author did not appear to have dwelt on. He had not compared the results of his cases year by year. He (Mr. Curling) had found that the mortality in cases of compound fracture fluctuated very much,—in one year the results were very favourable, and in others very unfavourable. Then, again, the peculiar circumstance of some of the cases seemed to him to claim separate consideration; for instance, cases, not rare, in which there was compound fracture of the tibia and fibula of both legs; and again, compound fracture into the ankle-joint was another kind of injury which would not bear classification with compound fracture of the tibia and fibula without opening that joint. It would also be interesting to know what was the nature of the accident, whether it was the result of direct violence or not. Mr. Curling remarked on the special circumstances which would sometimes influence the result of the treatment of compound fractures. Some few years ago excavations were made near the foundations of one wing of the London Hospital. A large quantity of bones, which had probably been placed there one hundred years before, was disturbed. For some time after there was a marked increase in the mortality at that end of the Hospital in comparison with that at the other end. He could also recollect that once for a period of five years no case of pyæmia occurred in the Hospital, and then another year in which it was very fatal.

The AUTHOR regretted that he could not supply more definite information in reply to the questions put to him. Information on the various points was, unfortunately, not recorded in a large proportion of the cases which he had collected. He had thought it better to limit his analysis to such general points as might be gathered from the whole series, and not to fill his paper with points upon which he could not arrive at any definite results.

The PRESIDENT drew attention to the fact that difference of season had a marked influence on the result of the treatment of compound fracture. He believed that the results were more unfavourable in summer.

The AUTHOR remarked that he should be glad at some future time, when reviewing his notes of the cases which he had taken, to bear in mind the many points which had been brought forward in the discussion. He did not think they could justly take into consideration such an exceptional cause as that stated by Mr. Curling.

A paper, by Mr. W. E. C. NOURSE, was read,

ON THE CAUSES OF TRUE LEPROSY.

The author, having seen this disease at Bergen and elsewhere, first adverted to the well-known fact that leprosy was a blood disease, or dyscrasia; that an altered condition of the blood, demonstrable by chemical analysis, accompanied the premonitory symptoms which preceded every fresh appearance of leprous blotches, both in the tubercular and in the anæsthetic form of leprosy, the blood at such times containing excess of albumen and fibrin; and that when the blotches were fully developed, the blood was found to be restored to its usual condition. Since, then, a changed condition of the blood was the proximate cause of leprosy, it was natural to look to the well-known agents concerned in making blood for the next link in the chain of causes of the disease. And here there was abundant evidence. Leprosy was frequent in Iceland, where the people inhabited small, close, dimly-lighted huts; were dirty in their personal habits; breathed a moist marine atmosphere; often had their garments wet; and lived on inferior food, badly cured. In Norway, where the food was inferior and too long kept,

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leprosy occurred; and on part of the west coast, where the food was unusually bad—where the people inhabited small, dirty, unventilated huts in damp and cold situations, and often had their garments drenched with rain or salt water—leprosy was peculiarly frequent. During the middle ages, when population had become too numerous to be sustained by the produce of the chase, and before the art of producing large supplies of good food was understood, leprosy had been common in all parts of Europe; and it had disappeared precisely as more copious and better supplies of fresh meat, vegetables, and bread were produced. It had then vanished first from England, then from Ireland and Scotland, and more recently from the Isles. On the Continent it had followed a similar rule, and the disease now only remained in particular maritime situations, where the standard of living was miserably low, the habits of the people dirty, and their dwellings small, dark, and ill-ventilated. The author believed that these conditions would always be found to coexist with it, and that it would be endemic wherever they obtained, irrespective of latitude. In Egypt, cases of leprosy were occasionally seen; and some of the Egyptians lived in a miserable squalid manner, and in small dirty huts. In Palestine, lepers were still found amongst the very poor, distinguished by want and dirt. Dr. Webster's account of the leprosy in Spain was precisely to the same effect, and he had shown that it prevailed in damp maritime districts, amongst people living in a poor miserable way, on bad and decaying food, and in close dirty huts. Mr. Nourse dwelt on these circumstances as the main causes originating the disease, and concluded by expressing his belief in its hereditary transmission.

Dr. Webster had brought before the Society during the previous session a paper on the same subject (a). He was much gratified in finding that the general results he had arrived at were confirmed by the author of the paper under discussion. He was particularly pleased to find that the evidences collected in the North of Europe tended to warrant the same general conclusion as he had arrived at by his investigations in Spain. There was one point, however, in which he differed from the author, viz., as to the hereditary transmission of leprosy. He had come to the conclusion that it was not transmitted hereditarily; and he believed that the author had not given sufficient weight to the fact that the children were born into the same condition of filth and wretchedness as their parents; and again that the diseased parent could beget a debilitated offspring without necessarily transmitting a specific taint. He considered, too, that the fact mentioned by the author, that the disease would pass over one generation, and that it often affected collaterals only tended to confirm his opinion. He (Dr. Webster) had recently been informed by Dr. Lindsay, of Perth, that the disease was very common in Iceland. It there also occurred in the poor and on the sea-coast, as it was found to do elsewhere. He had also heard that the disease was common in Portugal. There was a Leper Hospital in Lisbon containing fifty patients. In this Hospital, as he believed was the case elsewhere, there was a great preponderance of males over females. In Brazil the disease was common, and there too it affected males more than females. He believed that the disease was more common than was generally supposed. He had himself seen a case in the South of France, in the market-place of Bordeaux. The treatment mentioned by Mr. Nourse was the same as that adopted in Spain. It was, however, never successful.

Dr. Hare would remark that in cases in which both parents were deaf and dumb the offspring would nearly always be free from the defect; but, at the same time, the hereditary tendency was clearly pointed out by the fact that almost invariably some relative of the parents suffered under the infirmity. This showed that the passing over of one generation was no proof against the hereditary tendency of a disease.

A paper, by Dr. Edward H. Sieveking, was read, giving an

ANALYSIS OF FIFTY-TWO CASES OF EPILEPSY OBSERVED BY THE AUTHOR.

This was the second contribution of the same character as the one admitted into the *Transactions* of the Society for 1857, and the author has limited the analysis to the same number of cases, taken in the order of observation, as had been subjected to analysis on the former occasion. Only those points were brought forward on which satisfactory evidence could be obtained. *Sex.*—23 were females, or 44·2 per cent; 29 were males, or 55·8 per cent. Taking the two series together, the ratio of females to males was as 45·2 to 54·8. *Age.*—The following was the distribution throughout the different periods of life:—Under 10 years, 12 cases; from 11 to 20, 25 cases; from 21 to 30, 7 cases; from 31 to 40, 3 cases; from 41 to 50, 2 cases; above 51, 3 cases. The basis of this calculation is the time at which the epilepsy first showed itself. Arranged according to sex, we find during the first decennium 8 males and 4 females; during the second, 11 males and 14 females; during the third, 5 males and 2 females; during the fourth, 3 males; during the fifth, 1 male and 1 female; during the sixth, 1 male and 2 females. *Causes.*—An hereditary taint was traceable in 14 cases, but in 8 only of these was there evidence of epilepsy having occurred in a near relative of the patient. The exciting causes were traced in 37 cases as follows:—Uterine derangement, 9 cases; venereal excesses, including masturbation, 6 cases; fright, 4 cases; over-work, 4 cases; anxiety, 3 cases; dyspepsia, 3 cases; dentition, 2 cases; scarlet-fever poison, 2 cases (doubtful); meningitis, anæmia, blood-poison, and the development of puberty, each 1 case. *Premonitory Symptoms.*—Comprising under the term "aura" all symptoms indicative of a near approach of a paroxysm, the author found it in 21 cases, or forty per cent., or less frequently than it was met with in the first series, where 52 per cent. of the cases exhibited premonitory signs. *Headache.*—Headache is very commonly associated with epilepsy, but its significance varies much according to its period of occurrence; it may be habitual, or it may be connected with the attacks only as a precursor or a sequela. It was constant or frequent in 9 cases, 17·3 per cent.; it occurred after the seizures only in 12 cases, or 23·0 per cent.; it occurred only immediately before or after the fits in 3 cases, or 5·7 per cent. *Biting the Tongue.*—Although a large number of genuine cases of epilepsy occur in which this symptom is never met with, it is important as a corroborative symptom. In the first series it was met with only in 32·7 per cent.; in the present, 28 patients, or 53·8 per cent., exhibited this feature. It did not appear that the female sex, as might have been anticipated, were less prone to inflicting this injury upon themselves than males; because of the 24 cases in which the tongue had not been bitten, 16 were males and 8 females. *Urine.*—The author has found no constant derangement in the urine associated with epilepsy. He has always failed to discover any sugar, nor has he met with a constant or even frequent excess of phosphates, or a diminution of urea. In several cases he found the urine presenting a specific gravity ranging about 1030, and containing a large excess of urea. There was in the present series no case of albuminuria, except, perhaps, in one instance, in which a small quantity of albumen appeared to be present for a brief period. An excess of phosphates was observed twice, oxalates in or two cases, and an excessive deposit of lithates in a small number of cases. *Treatment.*—The author, while urging the value of treatment in alleviating the disease and indefinitely postponing the seizures in a large number of cases, admitted the doubt which always attached to any absolute cure of epilepsy. He advocated no specific, but the employment of all rational means indicated by the constitution and peculiar symptoms of each individual case. Above all, he considered perseverance in a combination of moral, regiminal, and Medical treatment essential. As many of the cases analysed had not been under the author's care permanently, he did not regard the results as to treatment indicative of what might have been effected in the whole series. He considered that he could lay claim to eight cures, that fifteen were decidedly benefited, while the remainder were either uninfluenced by treatment or did not continue under observation for a sufficient period to justify any positive statement as to the result.

Dr. Edward Smith wished to know whether the analyses of urine referred to were made from a single specimen, or from the whole quantity passed in twenty-four hours. This was important in estimating the quantity of urea.

Dr. Webster thought the author had not alluded to one very frequent cause of epilepsy,—secret vice. He (Dr. Webster) believed it was very frequently the cause of the

(a) See *Transactions* for 1860, p. 43.

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disease, especially in southern climates. He believed that epilepsy was more common in the South than in the North; that there was less in the South of France than in England, and even less in the South of France than in the North of that country. It was very common in Spain. He believed that insanity existed in frequency in an inverse ratio to epilepsy, the former being much more common in the North than in the South.

Dr. Russell Reynolds considered that the author had not made clear that the cases he had collected were all cases of true epilepsy. Thus, in the causes he had assigned he included meningitis, albuminuria, chlorosis, dentition, etc. He believed that the term epilepsy had been used in too lax a sense to warrant general conclusions from the cases brought together.

Dr. Barclay stated that Dr. Sieveking (who was not present) had expressly stated in the beginning of his paper that he had included no case in his paper except those of genuine epilepsy.

THE PATHOLOGICAL SOCIETY.

Tuesday, February 19, 1861.

Dr. Copland, President, in the Chair.

The President alluded to the death of Dr. Bentley, one of the originators of the Society, and said that the Society would join with him in regretting the loss of so valuable a member.

A report on Dr. Dickinson's specimen of colloid cancer was then read by Dr. Bristowe. Dr. Bristowe's examination confirmed the opinion held by Dr. Dickinson.

Dr. Andrews then exhibited a specimen of

CANCER OF THE ŒSOPHAGUS.

The patient, a woman, aged 53, began twelve months ago to suffer from dysphagia, which gradually increased, so that ultimately the swallowing of liquids even was impossible. She also soon after began to suffer much from fits of dyspnœa, which gradually increased, until she died. After death the disease was found to be infiltrating cancer of the œsophagus. The œsophagus was firmly fixed to the vertebral column, and its canal nearly closed. A rounded mass projected forwards and nearly closed the trachea. The recurrent laryngeal nerves were traced into the tumour. The glands about the neck were enlarged, but not from cancerous absorption: they were enlarged from old strumous disease merely.

Mr. Spencer Wells then presented

A TUMOUR AND PORTION OF THE LOWER JAW REMOVED BY EXCISION,

a week before the meeting, from a female patient, twenty-seven years of age. Photographs of the patient taken before the operation were also exhibited. The tumour had been of four years' growth, but had only grown rapidly during the last twelvemonth. About a month ago Mr. Hulme had extracted a tooth, bringing with its root a portion of the tumour; which portion on examination proved to be purely fibrous. It was determined therefore to remove it, with the portion of jaw implicated; and Mr. Wells, after exposing it by a single incision along the base of the jaw on the left side, divided the bone close to the symphysis and near the angle, and thus removed the whole of the disease. The patient had gone on remarkably well, the incision having nearly all healed by first intention.

Dr. Copland remarked on the great improvements in modern Surgery. Not many years ago the removal of such a tumour would not have been contemplated.

Mr. Curling exhibited

UNDEVELOPED TESTES FROM AN IDIOT.

They were taken from a diminutive idiotic lad, aged 19, who had been an inmate of Earlswood Asylum, under the care of Dr. Down. The boy had no hair in his axillæ, and very little on his pubes. The right testis, which was within the abdomen, about two inches from the external ring, weighed twenty grains. The left, which was in the scrotum, weighed thirty-seven. There were no marks of disease, no adhesions. The tubuli were inseparable. Mr. Curling had seen many cases in which defective intellect was associated with want of development of the testes. He had, however, during the past session, exhibited the undeveloped sexual organs from a man whose intellect was not impaired.

Mr. Curling also exhibited

A TESTIS WHICH HAD BEEN RETAINED IN THE ABDOMEN.

The specimen was taken from a body in the dissecting-room. The subject was a tall, muscular man, aged 25, who died of disease of the heart. The right testes was within the abdominal cavity, but the left was in the scrotum. The right weighed one hundred and thirty-two and a-half grains, and the left two hundred and ninety-five. In the left, the one in the scrotum, spermatozoa were found, and also in the vas deferens and vesicula seminalis of that side. On the right side no spermatozoa could be found in any of these parts. Mr. Curling mentioned that last session Mr. Partridge had exhibited secretion emitted from the penis of a man whose testes were retained. No spermatozoa were found in it. Mr. Curling had recently been consulted by a gentleman whose testes were retained, and who had been married ten years, and had no family. He had, however, sexual power. A patient was then in the London Hospital whose testes were retained. He also had no family. Mr. Curling mentioned that he had had occasion to remove a testes in the inguinal canal. In this case, although the testis was healthy, no spermatozoa were found in it. M. Godard, of Paris, had recently investigated the subject. He found that horses whose testes were retained in the abdomen were sterile, but capable of intercourse.

Mr. Partridge said the subject was one of great interest. In the last edition of his work on Medical Jurisprudence, Dr. Taylor had scouted the idea that persons with retained testes were sterile, who were acknowledged to be capable of sexual intercourse. It had, however, been clearly established, not only in man, but in the horse, pig, and goat.

Dr. Wilks exhibited a specimen of

STRICTURE OF THE DUODENUM IN AN INFANT.

The specimen was sent to him by Mr. Galton. The infant was born after a natural labour, and for an hour after birth appeared quite well, when it began to vomit greenish fluid. Purgatives were given, but the bowels were not opened. Vomiting continued for twelve hours, when the child died. The constriction was just above the entrance into the duodenum of the biliary duct. The intestine above the stricture was much dilated, and appeared at first sight as if continuous with the stomach, but a ridge marking the situation of the pylorus was distinctly traced. The canal was quite closed at the seat of the obstruction, or if not, the opening must have been extremely minute. The intestines below contained meconium. The specimen was interesting, Dr. Wilks remarked, in relation to the nature of the meconium, which was, he believed, admitted to be a biliary secretion. In this case however the vomited matter was not carefully examined, but was supposed to have been meconium. As to the origin of the stricture it might, he supposed, be either a malformation or stricture from cicatrisation.

Mr. Curling said the specimen was one of great interest as bearing on the subject of congenital malformations of the rectum. He had seen several cases in which stricture was clearly due to disease in intra-uterine life, causing contraction of the bowel. This was the more evident, as there were in some cases contraction at more than one point, and not in the rectum only, but also in the colon.

Dr. Wilks also exhibited a specimen of

STRICTURE OF THE ŒSOPHAGUS.

The stricture was due to epithelial cancer of the œsophagus just opposite the bifurcation of the trachea. The interest in the case consisted in the fact that the obstruction was supposed to have been due to an exostosis of the vertebræ.

Dr. Wilks believed that exostoses growing from the vertebræ were much more common than was generally supposed, and stated that Mr. Aston Key believed that exos-

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toses produced paraplegia. Just as they grew out, so they would grow inwards and press on the spinal cord. Dr. Wilks, however, after re-examining the specimens on which Mr. Key founded his opinion, believed that the paraplegia had resulted from softening of the cord.

Dr. BROADBENT exhibited a specimen showing

APOPLEXY INTO THE PONS VAROLII.

It was taken from a patient, aged 76, who was brought into St. Mary's Hospital in a state of unconsciousness. The left side of the face was paralysed, and the right side of the body. He died in a few days. After death a clot was found on the right side of the pons varolii, the rest of the brain being healthy.

Dr. BROADBENT also exhibited a specimen of

HÆMORRHAGE INTO THE SUBSTANCE OF THE BRAIN.

The patient was a young woman, aged 24. Her health was quite good until a few days before death. The attack occurred about two days after great excitement. There was no paralysis except a slight drawing of the mouth; she was, however, delirious. After death, a large clot was found in one of the hemispheres external to the corpus striatum and thalamus opticus. The vessels of the brain were not diseased.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—At the Comitia Majora Extraordinaria, held on Thursday, the 14th inst., the following gentlemen, having undergone the necessary Examination, and satisfied the College of their proficiency in the Science and Practice of Medicine and Midwifery, were duly admitted to Practise Physic as Licentiates of the College:—

Bowes, John, Herne Bay
May, Harry, Longton, Staffordshire
Prior, Frederick James, Tewkesbury
Roberts, Arthur, Montpelier-square, Brompton
Suffield, Charles Radford, Harborne, Birmingham
Wheeler, Henry, Clifton
Williams, William, Penrhyn, near Holyhead.

ROYAL COLLEGE OF SURGEONS OF EDINBURGH.—The following gentlemen having passed the Examinations for the Diploma, were admitted Licentiates of the Royal College of Surgeons of Edinburgh on the 9th inst.:—

Bell, Peter Gordon, Edinburgh
Grieve, Robert, Roxburghshire
Hannah, John Barlow, Lancashire
Hurley, Francis Bernard, Ennis
Lowe, John, Aberdeenshire
O'Hara, Malachi Charles, County Leitrim
Proctor, Alexander Forbes, Aberdeenshire
Rutherford, Gideon, Sutherlandshire.

APOTHECARIES' HALL.—The under-mentioned gentlemen passed their examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday the 14th inst.:—

Annias, William James, Devonport
Brecknell, William Henry, Gateshead, Durham
Dawson, Richard Henry, Broxholme, near Lincoln
Dickins, Frederick Victor, Manchester
Ellis, Thomas Smith, Eastington, Repton-on-Severn
Hitchman, William, Liverpool
Long, Robert Godolphin, Sturminster Newton, Dorset
Richardson, Timothy, Union-terrace, Commercial-road East
Stocker, Richard Charles Southby
Woodman, William Bathurst, Sonehouse, Gloucestershire.

The following gentlemen also on the same day passed their First Examination:—

Liddersdale, John, London Hospital
Oliver, Richard, Shrewsbury
Yates, James, Pit Bank Hall, Oldham, Manchester.

APPOINTMENTS.

LISTER.—Dr. Lister was appointed Honorary Surgeon to the Dispensaries, Liverpool, on February 14.

MAYNE.—Robert Mayne, Esq., M.B.T.C.D., Fellow of the King and Queen's College of Physicians in Ireland, has been elected Physician to the Adelaide Hospital, Dublin, in the room of Dr. Hudson, elected to the Meath Hospital.

DEATHS.

BISHOP.—February 12, at the Priory, Monk Sherborne, Basingstoke, Hants, John Green Bishop, M.D. Lambeth, M.R.C.S. Eng., aged 71.

BURNETT.—February 16, at Chichester, Sir William Burnett, M.D., K.C.B., etc., late Director-General of the Medical Department of the Navy, aged 82.

DIGNAM.—January 24, at Kingston, Jamaica, Dr. Harry Graham Dignam, aged 28.

DONNALL.—February 11, Robert Sawle Donnall, jun., late of Falmouth. M.R.C.S. Eng.; L.S.A. Lond., aged 46.

GOODSON.—February 8, William Goodson, Surgeon R.N., aged 95.

LOY.—February 4, Martin Augustine Loy, of Pickering, Yorkshire, L.R.C.S. Edin.; M.D. Edin., aged 86.

MACKINNON.—February 13, at Edinburgh, Kenneth M. Mackinnon, M.D., late Apothecary-General H.E.I. Co.'s Service, Bengal, aged 56.

MAUNOIR.—Professor J. P. Maunoir has just died at Geneva, at the advanced age of 93. He was the author of several important Surgical treatises, that "On Hydrocele of the Neck" being among the number. He was an unsuccessful candidate for the Chair of Clinical Medicine at Montpellier, which Delpech succeeded in obtaining.

MEDICAL PATRIARCH.—Longevity among Medical men is not unusual in England, of which an instance appears in our Obituary, namely, the death of William Goodson, Surgeon R.N., at the advanced age of ninety-five years.

MEDICAL TITLES.—A meeting of the Branch Medical Council for Ireland was held on Saturday last, and a resolution was passed in conformity with the opinions of Sir Hugh Cairns and Mr. Hobhouse. The effect of this movement is to take from some fifteen or twenty gentlemen the title of Doctor which the Branch Council had conferred upon them. We have heard that the meeting was a very stormy one, and that the resolution was carried by the casting vote of the chairman, Dr. Stokes.

SPECIFIC GRAVITY OF FRESH EGGS.—The following facts have been established by a series of experiments performed by M. J. Labiche, of Louviers. 1. Newly-laid eggs have not all the same sp. gravity (placed in a solution of chloride of sodium, sp. gr. 1060, some sink, and others swim.) 2. Every egg that falls to the bottom of a solution of chloride of sodium, sp. gr. 1040, can be used in cooking; those that float *in* the liquid are not sufficiently fresh for that purpose; those that swim *on* the surface are spoiled.

OVARIOTOMY IN MANCHESTER.—Dr. Roberts publishes in the last number of the *Dublin Quarterly* a very successful case of ovariotomy performed by him in St. Mary's Hospital, Manchester. He makes the following singular remark in his paper:—"*All* the cases I have seen in which the large incision 'from sternum to pubes' was used proved fatal." It would be interesting to know *how many* cases are to be understood by *all*.

HER MAJESTY'S LEVEE last week was attended by Doctors Michael Faraday, Rae, Thomas K. Chambers, William White, Ramsbotham, Frederick G. Reed, Sieveking, M'Cann, Dalton, J. B. Gibson, C.B., and Francis R. Hogg; Messrs. Borlase Childs and Tamplin. The following gentleman was presented:—Dr. Williams, on promotion, return from India, and appointment as Principal Medical Officer in Ireland, by Dr. Gibson.

CONCOURS IN FRANCE.—This system, heretofore much lauded by our Gallic neighbours, as often elsewhere, has just received a heavy blow and great discouragement from an Imperial decree, dated the 15th of January last, which orders that henceforward all Professorships in French Veterinary Schools, will be no longer attainable by competition of voluntary candidates, but are to be directly filled up by the Minister of Agriculture's special appointment!

PAUPER LUNATICS.—On the motion of Mr. Locke King, an address to the Crown has been agreed to for a return showing the names of the counties and towns, having Recorders, in England and Wales, which have complied with the Act 8 and 9 Victoria, cap. xcvii. for the legal custody of the insane poor, distinguishing those which have complied with the provisions of the Act from those who have not.

DISLOCATION TREATED BY WIRING.—In the *Kansas City Medical and Surgical Review* for September, Professor J. T. Hodgen reports a case of dislocation of the scapular end of the clavicle, which resisted every means for its retention in place, until wiring was resorted to, as is done in some cases of fractures. Twelve strands of fine iron wire were

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twisted together, forming a cord as large as a "crow-quill." Holes were made in the acromion and clavicle, and the dislocated bones firmly wired together. No further trouble was experienced, and in twenty-five days the wire was removed. Professor Hodgen says, "I claim that in those dislocations of either extremity of the clavicle in which complete disruption of all the connexions has occurred, and in which the bones are widely separated, the method adopted in the case reported is that which best answers the two important indications: *i.e.*, it keeps the parts accurately in proper position, and insures sufficient plastic exudation to unite them firmly, and thus insure good results in cases where failure would almost necessarily attend the ordinary methods of treatment."

VITAL STATISTICS OF LONDON.

Week ending Saturday, February 16, 1861.

BIRTHS.

Births of Boys, 889; Girls, 903; Total, 1792.
Average of 10 corresponding weeks, 1851–60, 1746·5.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	643	685	1328
Average of the ten years 1851–60	609·9	618·0	1222·9
Average corrected to increased population..	..	..	1345
Deaths of people above 90	2	3	5
Deaths in 15 General Hospitals	54	28	82

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1851.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	376,427	..	3	3	3	9	4	5
North ..	490,396	2	2	5	..	18	6	1
Central ..	393,256	..	9	3	1	16	5	1
East	485,522	4	7	2	2	20	5	3
South ..	616,635	2	3	11	2	24	10	7
Total.. ..	2,362,236	8	24	29	8	87	30	17

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·697 in.
Mean temperature	37·6
Highest point of thermometer	53·3
Lowest point of thermometer	24·4
Mean dew-point temperature	34·1
General direction of wind	S.W.
Whole amount of rain in the week	0·22 in.

TO CORRESPONDENTS.

T. W. B.—No difference will be made by entry next April.

Dr. Ussher.—The lines about the Invalid Soup appeared originally in this Journal.

Mr. Bryant's letter on Hospital Statistics is unavoidably delayed until next week.

ERRATUM.—P. 182, second col., line 24, *for* Tynee *read* Tyrell.

A Subscriber.—The arrangement between a Poor-Law Medical Officer and his Assistant cannot be interfered with if approved by the Board of Guardians and the Poor-Law Board; but if any want of competency be alleged against the Assistant, the Poor-Law Board might insist upon the appointment of a qualified Medical man for the district.

Mr. Armstrong Todd's reply to Mr. H. Thompson has been received; but it seems unnecessary to continue a discussion which must become merely personal. It is quite clear from Mr. Thompson's letter that he assisted in the endeavour to found one Hospital for Stone, and also assisted in the endeavour to suppress another,—and there the personal question may rest.

F. G. Figg, M.D.—Further controversy on the meaning of the words rendered *wine* in the English Bible is unsuited to our columns. Besides, it is perfectly irrelevant to the question of the propriety of abstinence from alcoholic drinks. If a man for his own health, or for the sake of benefiting his neighbours, chooses to abstain from wine, let him: he is perfectly justified. But if he attempt to show that small beer is poison, and that moderate wine-drinking is contrary to the doctrines of religion, he excites hostility and ridicule, by propositions erroneous in themselves, and irrelevant to the matter at issue.

DIET LISTS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Would one of your readers be so good as to direct me where to find the most complete statistics of dietetics, including quantity and description of food, supplied to convicts, army and navy, etc., British and foreign?

I am, &c.

Edinburgh, February 18. SCALPEL.

BELLADONNA.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I am rather surprised that none of your correspondents have hit on a commonly-received origin of the name of this plant. The Italian ladies did not use it as a cosmetic, but to cause dilation of the pupil, and so produce a rich, dark, languishing eye.

I am, &c. K.

COMMUNICATIONS have been received from:—

M. CLAUDE BERNARD; Dr. MCWILLIAM; Dr. WIBLIN; Mr. W. ADAMS; Dr. HILLIER; Dr. JAGO; Mr. RUMSEY; Mr. SOLOMON; Mr. WILDE, Dublin; Mr. A. TODD; Mr. H. SMITH; Mr. HOLMES; Mr. BRYANT; Mr. W. MARTIN; Mr. MCKINNELL; Mr. DOWIE; Mr. S. SMITH; Mr. STRINGER; Mr. KING; Mr. HARRIS; Dr. ULLERSPERGER, Munich; Dr. GRAY; REGISTRAR-GENERAL; Dr. FAIRLESS; Mr. B. WALTON; Mr. HAROLD; Dr. USSHER; REGISTRAR-GENERAL, Edinburgh; Dr. MILLAR; and Mr. WEBBER.

APPOINTMENTS FOR THE WEEK.

February 23. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

ROYAL INSTITUTION, 3 p.m. Dr. E. Frankland "On Inorganic Chemistry."

25. *Monday*.

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

MEDICAL SOCIETY OF LONDON, 8½ p.m. Dr. B. W. Richardson "On Life and certain of its Phenomena."

26. *Tuesday*.

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Professor Owen "On Fishes."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Dr. Kirby "On Premature Labour Induced on a Dwarf with Distorted Pelvis." Dr. Bullar, of Southampton, "On Pulsating Bronchocele."

ROYAL COLLEGE OF SURGEONS OF ENGLAND. Professor Savory "On the Physiology of Food."

27. *Wednesday*.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

ROYAL COLLEGE OF PHYSICIANS, 4 p.m. Dr. Guy "On Tabular Analysis Applied to the Discovery of Truth in Medicine and the Allied Sciences."

HUNTERIAN SOCIETY, 8 p.m. Mr. Solly "On the Use and Abuse of the Operation for the Excision of Joints." Council Meeting at 7½ p.m.

28. *Thursday*.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Professor Tyndall "On Electricity."

March 1. *Friday*.

Operations, Westminster Ophthalmic, 1½ p.m.

ROYAL COLLEGE OF PHYSICIANS, 4 p.m. Dr. Guy "On Tabular Analysis Applied to the Discovery of Truth in Medicine and its Allied Sciences."

ROYAL INSTITUTION, 8 p.m. Professor H. E. Roscoe "On Bunsen and Kirchhoff's Spectrum Observations."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Annual Meeting and Address of the President.

WESTERN MEDICAL AND SURGICAL SOCIETY OF LONDON, 8 p.m. Practical Evening for the Narration of Cases and the Exhibition of Specimens.

EXPECTED OPERATIONS.

King's College Hospital.—The following Operations will be performed this day (Saturday) at 2 o'clock:—

By Mr. Fergusson—Removal of Growth from Ear; Removal of Tumour from Eyelid; Partial Amputation of Foot; Amputation of Finger; Removal of Growth from Tongue; Harelip; Excision of Breast.

By Mr. J. Wood—Radical Cure of Hernia.

Metropolitan Free Hospital.—The following Operation will be performed on Monday next, at 2 o'clock:—

By Mr. Borlase Childs—Fistula in Ano; Harelip.

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PULVIS JACOBI *VER.*, NEWBERY'S.

To the Medical Profeſſion of Great Britain and Ireland.

GENTLEMEN,—We beg to call your attention to the following extracts from a Paper by the late John Cheyne, M.D., F.R.S.E., M.R.I.A., Phyſician to the Hardwicke Fever Hoſpital, Dublin, and Phyſician-General to His late Majeſty's Forces in Ireland, &c. &c., contained in the "*Dublin Hoſpital Reports*," *vol.* 1, *p.* 317.

"Since this caſe came into my poſſeſſion, I have been led to "make a good many clinical experiments, which have enabled me "to verify the reports which I had heard of the efficacy of JAMES'S "POWDER, in ſometimes removing the APOPLECTIC DIATHESIS in "perſons advanced in life. It is, moreover, worthy of obſervation, "that JAMES'S POWDER has been of remarkable utility in "certain inſtances of DETERMINATION OF BLOOD TO THE HEAD, which "occurred at an early period of life, and threatened to end by "effuſion. Laſtly, in two caſes of GENERAL PLETHORA, in which, "however, the head was more affected than any other part, "JAMES'S POWDER was exhibited by me with perfect ſucceſs."

Alſo *vol.* 1, *p.* 320.

"The following very ſimple method of exhibiting JAMES'S "POWDER, in caſes of undue determination of blood to the "head, is that which I have generally purſued. The patient is "made to begin with a very moderate doſe, not more than two "grains at bedtime, and to increaſe the doſe by half-a-grain every "night, until ſome ſenſible effect is produced upon the ſtomach, "bowels, or ſkin. Should the ſtomach be affected with ſickneſs, "the doſe muſt be leſſened by one grain on the following night. "By the addition of a little rhubarb to it, a larger quantity of "JAMES'S POWDER may be adminiſtered than the ſtomach could "otherwiſe bear. If the ſkin is ſoftened, or the bowels affected, "the doſe ſhould not further be increaſed, but it muſt be repeated "every night for a conſiderable length of time: in ſeveral inſtances "I have known eighteen or twenty grains taken for a conſiderable "period without any inconvenience."

The following extract (ſhowing the increaſing eſtimation in which the true Dr. James's Powder is held by Medical Practitioners) is taken from "The Lumlæan Lectures," 1858-59, delivered before the Royal College of Phyſicians, by A. Tweedie, M.D., Phyſician to the London Fever Hoſpital, who is admittedly one of the higheſt practical authorities on the ſubject of Fever. He ſays, ("*The Lancet*," *June* 16, 1860, p. 590,) as follows:—

"If the febrile excitement be ſuch as to require antimonial prepa- "rations, a pill containing 2 or 3 grains of James's Powder (prepared by "Newbery) ſhould be taken at intervals according to circumſtances."

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"I wiſh that your preparation was always uſed."

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ORIGINAL LECTURES.

LECTURES
ON
THE SPINAL CORD,
DELIVERED AT
The College of France,
DURING THE SUMMER SESSION 1860,

By M. CLAUDE BERNARD,
Member of the French Institute; Professor of General Physiology at the Faculty of Sciences, &c.

LECTURE VIII.
ON THE PROPERTIES OF DIVIDED NERVES.
(*Continued.*)

Summary: Effects of Toxic Substances on Divided Nerves—Various Reasons assigned for the Failure of the Experiment performed at the close of the Preceding Lecture—In Physiology, as well as in the other Sciences, the Results of well-made Experiments are always Identical—There exist no Exceptions in Medicine—Considerable Differences, however, are met with in Individuals, in the State of Health as well as in that of Disease—The Excessive Irritability of Divided Nerves is a Morbid Phenomenon—It is also one of the First Symptoms produced by the Action of Woorara and other Poisons—The Experiments which failed in the preceding Lecture are successfully performed before the Class.

GENTLEMEN,—The modifications which arise in the properties of the nervous system, under certain morbid conditions, must continue to occupy our attention to-day. You are aware that when compared to the phenomena which pertain to the normal state, these changes appear to consist almost exclusively in an exaggerated degree of excitability.

In the preceding Lecture we attempted to prove that the action of medicaments and poisons on diseased nerves give rise to phenomena of a similar kind. We therefore galvanised the sciatic nerve on both sides, in frogs which had been previously poisoned with a small dose of woorara, in order to show you that excitability disappears in the divided nerve long before it ceases to exist in the others. The experiments performed for this purpose having completely failed, we repeated them in our laboratory immediately after the Lecture, and we succeeded at once in obtaining the above-mentioned results. There can be no doubt that our previous failure was occasioned by the excessive heat,—a circumstance which usually accelerates the operation of all toxic agents. We ascertained, besides, that our galvanic apparatus being out of order, the currents produced were not sufficiently powerful to exhibit, in its full force, the difference between the two sets of nerves. However trifling these minute details may appear to some of you, we cannot dispense with calling your attention to them; for it has always been our earnest desire to convince you that well-made experiments, in physiology as well as in other branches of science, invariably lead to the same result. The word *exception* has, in fact, been too often diverted from its proper meaning by authors who have written on Medical subjects; it must always be kept in mind that strictly speaking there exist *no exceptions* to general rules,—no facts which cannot be reconciled with the ordinary laws of life; and that the only real difference observed between individuals belonging to the same, or to distinct species when placed in similar conditions, resides in the various degrees of intensity exhibited by the vital powers. It is, therefore, the imperfection of our knowledge which compels us to view as exceptions to general rules, certain unusual phenomena the mechanism of which is not yet clearly understood. But it is one of our fundamental axioms, "That under given conditions, identical results are always produced;" to deny the truth of this principle would be to strike at the root of experimental physiology.

The differences observed between individuals are not exclusively met with in the pathological state. In the healthy condition considerable variations constantly occur for notice; and the graduated galvanic apparatus enables us to prove that between two perfectly sound frogs the amount of excitability in motor nerves varies to the extent of eight or ten degrees. It may be incidentally remarked, that in a sound and vigorous animal a more powerful current is required to stimulate muscular contraction than in a feeble and sickly subject: there exist, therefore, certain morbid conditions which produce in the living tissues effects analogous to those of the cessation of nervous power. But when it is intended to compare the state of the nerves, under the influence of certain agents, with the properties exhibited in the normal condition, we must always have recourse to animals in the full enjoyment of health and strength; in these subjects, the characteristic differences of intensity, which it is our object to ascertain, are always found more extensive than in deteriorated individuals. If, for instance, the excitability of a sound nerve and that of a divided one stand to each other in the relation of 1 to 10 in healthy subjects, they will probably stand in the relation of 1 to 5 in diseased animals. In other words, if the excitability of nerves is greater in the morbid state before the operation, it is far from increasing in the same ratio after the experiment; the difference observed is consequently less striking.

We therefore consider this peculiar irritability as resulting from a pathological state of the nervous system, and as one of the first symptoms of its disorganisation: when, for example, a small dose of woorara is administered to a frog, the motor nerves, although still adhering to the spinal cord, are, during the first few moments, found to grow more excitable: if in the sound animal a current answering to ten degrees of the galvanometer was required to produce contraction in the muscles, six, seven or eight degrees will be found sufficient after poisoning it; but this ascendant progression shortly ceases; the excitability of the nerves diminishes, gradually returns to its former level, soon falls below it, and totally disappears at last: the process might, in this respect, be delineated by tracing a curve, which after rising above horizontal line, falls back to its level, and sinks indefinitely below it.

This interesting series of phenomena is not, in all probability, exclusively peculiar to the action of woorara; we believe it to attend the effects of all poisons which assail the nervous system: viewed in this light, it would be the first result of the morbid condition which arises from their presence. At the moment when the toxic substance has been introduced into the vessels, the animal is in the physiological state,—the power of voluntary contraction still exists; but at the very instant when galvanic excitability begins to increase, the effects of the poison are just commencing to be felt, and the voluntary powers of motion are slightly impaired; and when the excitability of the nerves under galvanic influence has returned to its former state, a complete paralysis has already taken place.

We shall now repeat the experiments which failed at our last meeting; you will find them perfectly satisfactory when performed under proper conditions; and the result will appear immediately after dividing the nerve; for if this were not the case, it might be objected that a divided nerve always grows more excitable when exposed for a certain lapse of time to atmospheric action.

[The sciatic nerves being laid bare on both sides in a vigorous frog, one of them is divided, care being taken not to injure the vessels. Both of them are now electrified with the graduated apparatus; contractions are produced in the mutilated limb when the apparatus stands at 1° 5′, and in the other at 13°; the difference being therefore equal to 11° 5′. Two drops of a solution of woorara are then injected under the animal's skin; five minutes after this, the nerve which has not been divided, produces contractions at 12°. Its excitability has therefore increased; at the same moment the cut nerve requires 4°; its excitability has therefore diminished. Ten minutes after the operation, the non-divided nerve reacts at 11°, the cut one at 7°, and the power of voluntary motion appears to be notably diminished. After the lapse of fifteen minutes, the divided nerve has lost all excitability; the other still retains a considerable amount of it. The complete disappearance of voluntary motions took place twenty minutes after the operation; at this moment the non-divided nerve had fallen back to its former state (13°), and after the lapse of twenty-three minutes, the nerves were dead to all external excitation (a).]

(a) When a strong dose of woorara is administered to a frog, death is usually produced within three or four minutes.

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You therefore perceive, Gentlemen, that hyperæsthesia in the organs of sense is the symptom which corresponds to convulsions in the locomotive apparatus; and in both cases the morbid state is merely a deviation of the physiological powers.

ORIGINAL COMMUNICATIONS.

ARMY MEDICAL REPORTS.

No. XXXIX.

REPORT ON THE

TREATMENT OF INTERMITTENT FEVERS BY LARGE DOSES OF ARSENIC.

By Assistant-Surgeon R. A. CHAPPLE,
In Medical charge of Royal Artillery, Poona.

EXTRACT from Circular No. 780, of 1860, dated June 2, 1860, paragraph 2:—"If Medical Officers would kindly give an extended trial to the use of Liq. Potassæ Arsenitis in doses and extent specified in cases of uncomplicated intermittent fever, the Superintending Surgeon would be happy to receive and forward to the Principal Inspector-General a Special Report from such Medical Officers on the result."

In compliance with the above-quoted wish expressed by Deputy Inspector-General Stovell, I adopted the treatment of intermittent fevers by large doses of arsenic in the Hospital of 1-13 Battery Royal Artillery. The trial extended from July 1 to October 31, a period of four months, during which time every case was carefully kept, and every circumstance likely to influence the action of the medicine noted.

Before exhibiting the table of results, a few remarks on the previous state of health of the men will be necessary.

The Battery was stationed in Baroda (Guzerat) for 14 months previous to its arrival in Poona. Seven weeks had elapsed from the time it left Baroda till its arrival in Poona. While stationed in Baroda, the men were very unhealthy; in 12 months out of an average of 200 non-commissioned officers and men 776 cases of fever were admitted. Many more were treated, but not taken into Hospital. As this Report refers solely to fever, I shall confine my remarks to the prevalence of that disease; but I may here mention, as bearing on the statement of general ill-health and tendency to disease, that this Battery suffered much from sun-stroke, and had 70 men on the sick list, at a time when other European troops, similarly circumstanced, were exceedingly healthy. It may appear hypercritical to enter so minutely into the previous general health of the men, but I think in the sequel it will not seem so. The attacks of intermittent fever were not at first marked by any peculiar symptoms. As the paroxysms recurred they were ushered in by congestion of stomach, liver, and bowels, evident by bilious vomiting and purging.

Frequently patients have come to Hospital complaining of bilious vomiting and purging, when no sign of visceral disease was present, and when not traceable to a previous night's debauch, though no symptoms of fever existed. I admitted them under the head of intermittent fever, confident that the vomiting and purging were precursors of an attack: the result generally proved me correct. From frequent recurrence of fever, and fourteen months' residence in the hot and depressing station of Baroda, the men became much enervated, pale, listless, and incapable of much fatigue or exertion. However, in the five months which elapsed from the time of leaving Baroda till the arsenical treatment was adopted, the men were considerably restored to their original good health, and the attacks of fever not so frequently accompanied by gastric and intestinal derangement. As I have now given a brief sketch of the general health of the men, their liability to fever, and the symptoms which accompanied it, I now beg a reference to the table of results.

It will be at once perceived by a reference to the table, that the proportion of successful cases is increased with the increase of the dose. With ♏ xx. doses 26 cases re successful out of a total of 53 treated, and with ʒss. and ♏xxxx. doses 59 were successful out of 87 treated. With the increased doses there were 28 unsuccessful cases: 8 cases not benefited by the arsenic, and 20 cases in which it was omitted. In order to allow of fair conclusions of the merits of a drug being drawn, everything likely to influence its action ought to be taken into account. I, therefore, request a reference to my introductory remarks. I there pointed out that gastric and intestinal derangement at one time invariably ushered in the paroxysms, and though the tendency to vomiting was much lessened after leaving Baroda, and though the cases for arsenical treatment were selected, and where the least gastric irritation was present arsenic was not used, still a predisposition to it may have existed.

TABLE SHOWING THE RESULT OF LARGE DOSES OF ARSENIC IN CASES OF INTERMITTENT FEVER.

Total treated.	Modes of Administration and Dose.	Successful Cases, with amount of Liq. Arsenicalis exhibited before Cure.				Liq. Arsenicalis omitted on account of nausea or vomiting, with amount producing the same.				Unsuccessful Cases, with amount of Liq. Arsenicalis exhibited.				Proportion per cent. of Successful Cases to Total treated with Arsenic.	Proportion per cent. of Cases of Nausea or Vomiting to Total treated with Arsenic.	Proportion per cent. of Unsuccessful Cases to Total treated.	Amount of Quinine effecting a Cure when Arsenic had failed, was omitted.				Cases being considered inapplicable to treatment by Arsenic, treated by Quinine, with amount effecting Cure.			
		ʒj.	ʒij.		Total.	♏xx.	♏xxxx.		Total.	ʒj.	ʒij.		Total.				Grs. viij.	Grs. xvj.	Grs. xxiv.	Total.	Grs. viij.	Grs. xvj.	Grs. xxiv.	Total.
220	Liq. potassæ arsenitis, gtt. xx. every hour or second hour for three doses	24	2	..	26	1	2	..	3	22	2	..	24	49	5	50	5	14	8	27	20	35	15	70
	Liq. arsenicalis in ʒss. and ʒij doses, repeated every second hour for three doses	ʒjss. 36	ʒiij. 22	ʒv. 1	59	ʒss. 7	ʒj. 7	ʒjss 6	20	ʒiss. 6	ʒiij. 2	..	8	66	22	32	12	16	..	28	6	4	..	10
	Total	60	24	1	85	8	9	6	23	28	4	..	32	60	16	39	17	30	8	55	26	39	15	80

With quinine 80

With arsenic—Successful 85

Unsuccessful .. .. 55—140

Total treated 220

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and if the predisposition did exist in such cases, I will leave any one to judge how easily nausea or vomiting would be excited. I can only reconcile the intolerance of arsenic to predisposition, or, perhaps, the following remark of M. Boudin—"La tolerance pour l'arsenic baisse en général avec la disposition de la fièvre," may explain it.

The character of the fever was daily changing. Cases of quotidian treated one month, probably the next month would be found tertians. This threw me out of my calculations, for to cases admitted as quotidian, arsenic was exhibited the day after admission as close as possible to the hour of the expected attack. No attack occurred, and the paroxysm was supposed to be cut short; but to my great disappointment it recurred on the second day after admission. When a man had two or three attacks before coming to Hospital, it was easy, by inquiring, to ascertain the character of the fever, and the arsenic was given only on the day of the expected paroxysm. That the disposition of the fever was towards recovery there can be no doubt, the same man did not suffer so frequently, the attacks were milder, and the character of the fever had considerably changed from quotidian to tertian. That the nausea or vomiting was the natural effect on the stomach of large doses of arsenic, I do not think likely, for Dr. Turner, of the Bombay Horse Artillery, has been in the habit for some years past of administering large doses (ʒij. in six hours), and he has assured me that he has never had to contend with vomiting from the exhibition of arsenic. The different effects produced could not be attributable to difference of the preparations of arsenic, because that which both Dr. Turner and I used was obtained from the same Medical store, and I presumed there received fr .n the same source. We cannot, therefore, attribute the nausea (the moment nausea was complained of I omitted the arsenic), or vomiting as the natural consequence of large doses; but rather, as I said before, either to predisposition, to gastric irritation, or, as I before stated, that which is most likely, to quote M. Boudin's words, "The tolerance of arsenic is generally diminished with the disposition of the fever."

I have never had to contend with intestinal derangement from the exhibition of large doses. I at first gave the liquor arsenicalis in cold water, but when it disagreed with the stomach, I added ♏v. or ♏x. of tinct. opii. to each dose, and as that was no improvement, I gave it in cold infusion of chirayta, but without better effect. It will be seen that 28 out of 87 total treated with ʒss. or ♏xxxx. doses, were unsuccessful. Now, of these, 20 were cases in which arsenic was omitted, and 8 were decided failures. Other Medical Officers in these cases might have persevered in the arsenic, but (it will be seen that six got only ʒjss. each, and two ʒiij. each) it would serve no purpose to enter into the reason I had for discontinuing the arsenic in these cases, if either predisposition to gastric irritation, or the disposition of the fever influencing the tolerance of arsenic, be allowed to have only 8 failures out of 87 treated, certainly most encouraging results. In drawing such favourable conclusions, I am not advocating the use of arsenic, but this Report would not only be incomplete, but useless, if I did not lay open every circumstance which would influence the success or failure of arsenical treatment. That the "tasteless ague drop," as a remedy for the disease which its name implies, is of ancient date, but long fallen into disuse, every one knows, but the credit of its revival in large doses is due, I believe, to Dr. Turner, of the Bombay Horse Artillery. It may seem strange that 70 out of 123 cases (as shown in the first line) were considered inapplicable to treatment by ♏xx. doses of arsenic, whilst only 10 out of 97 were considered inapplicable to treatment by larger doses. This I can explain by the fact, that every re-admission in the one month, if previously treated with arsenic, was treated by quinine.

That I at first adopted the arsenical treatment with much reluctance I confess; the smallness of the dose with which I commenced, and the number of cases considered inapplicable, will prove that I did not, without a trial, place much faith in the antiperiodic virtues of arsenic. On the contrary, I was loath to abandon quinine; I had every reason to be satisfied with it, I had abundant proofs of the powers which it possesses over fever. I could invariably exhibit it in 2 or 2½ grain doses with perfect confidence in its success, in it I had a safe and efficacious remedy; why, then, should I adopt in is stead an uncertain remedy, and one requiring much care and caution in its administration? I did so to test the value of arsenic, which, if possessing good anti-periodic properties, we might substitute for quinine, and thereby save a valuable drug for cases in which its use is indispensable. The amount of quinine used in this country in cases of simple intermittent fever must be enormous, and the expense to Government very considerable. If quinine is becoming daily more scarce, the dread of which I have seen frequently expressed, we shall be obliged to relinquish its use for all diseases in which it is not absolutely required, and it is well to have a remedy which may relieve the great drain on quinine. I do not for a moment imagine that arsenic will ever supersede quinine in intermittent fever, neither do I attempt to prove the equality of arsenic and quinine, because in many cases the former medicine is not admissible, but I have never met a case in which I could object to the latter; but when the fever is uncomplicated, the attack well marked, and the medicine administered in sufficient doses, the arsenic will generally prove as efficient an anti-periodic as quinine. There always must be failures with arsenic, because cases of intermittent fever will often be met with in which paroxysms recur for several days, these cases will resist quinine as well as arsenic; but if we commence the treatment, and the attacks return, we cannot continue the exhibition of large doses for more than three days, and in the majority of cases it is by no means advisable to continue it beyond the second day. We therefore must abandon the arsenic and fall back on quinine; for such reasons arsenic can never supersede quinine, but in many cases it can be used with equal advantage.

Poona.

ON

PARASITIC AFFECTIONS OF THE SKIN.

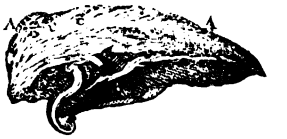
By T. McCALL ANDERSON, M.D.

Fellow of the Faculty of Physicians and Surgeons of Glasgow, &c.

No. IV.—*Continued.*

Favus of the Nails (*Favus Unguium*) is not commonly met with. It occurs in those who have been long affected with favus of the hair-follicles. Persons so affected, in scratching the diseased parts with the nails, succeed in causing a deposit of some of the vegetable matter beneath the nail, where it takes root and germinates. Instances of favus unguium, as a primary affection, are very rare, but they have been met with. When the vegetable matter is inserted beneath the nail it is under circumstances the most favourable to its germination, situated as it is between the superficial and deep epidermic layers, the nail forming the superficial one (see Fig. 5). Mahon first observed this affection on his

FIG. 5.



A A, upper surface of nail; B B, lower surface of nail; C C, favus matter (white in the woodcut, yellow in the original), running upwards and forwards between the laminæ of the nail.

own person, having contracted it while treating children affected with favus. The symptoms are well described by Bazin. After the spores have remained for some time, and have commenced to germinate beneath the nail, the latter becomes thickened over the affected part, while its colour at the same time apparently changes, becoming gradually more and more yellow, owing to the favus matter shining through. As the fungus grows and increases, it gradually presses on the nail, causing further changes. Its longitudinal striæ become very evident, and fissures are formed. By degrees, as the pressure on the superjacent nail continues, it becomes thinner and thinner, till a perforation occurs, and then a favus cup makes its appearance externally, more or less deformed, however, owing to the pressure previously exercised upon it from above.

The consideration of the *causes* of favus involves many

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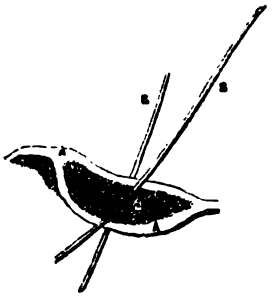
points of interest; and, first of all, the characters of the crusts when examined microscopically. When one of these is seen in the earliest stage of its development, it is found to be covered by a thin layer of epidermis externally, but as it increases in size, and becomes more prominent, this epidermic covering is ruptured. Independently of this, however, each crust is enveloped in a capsule, in structure quite amorphous, and within it is enclosed the true favus matter (see Fig. 6). When a little

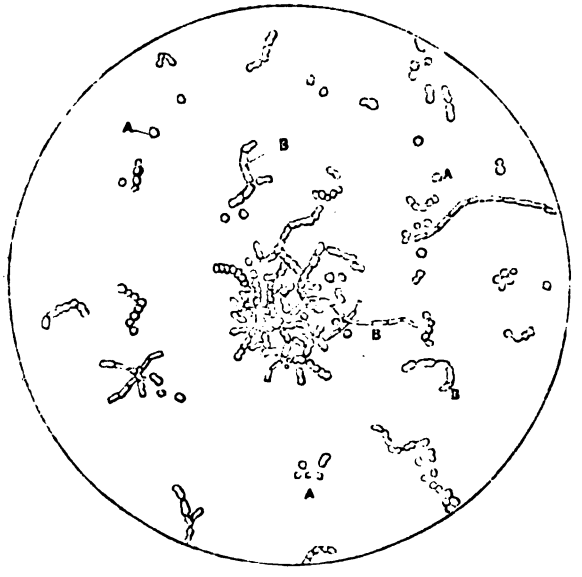
FIG. 6.



Favus cup. A A, amorphous envelope; C, favus matter; B B, hairs traversing the favus cup.—(Robin.)

of it is broken up and examined microscopically, it is found to consist of a vegetable formation, to which the name Achorion Schönleini has been given, in compliment to Schönlein, the discoverer of the fungus. It consists of numerous little oval or rounded bodies, called spores or sporules, having a diameter of about the $\frac{1}{3000}$th of an inch (see Fig. 7).

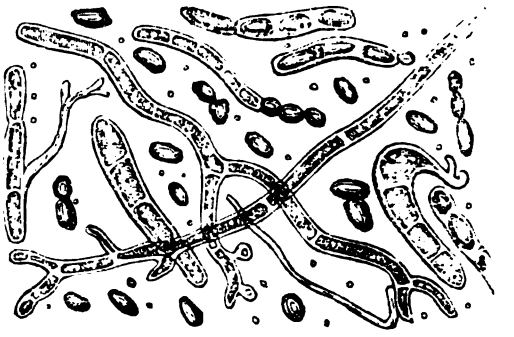
FIG. 7.



Fungus matter from a favus crust. A A A, isolated spores; B B B, chains of spores.

Many of these are isolated, others united together in the form of rosaries. Besides these there are numerous tubes, many of them branched, some simple, others jointed, as if originally formed by a number of sporules united together at their ends. The reverse, however, is the case, for it is the sporules which are formed from the tubes, although these latter are originally derived from the sporules; and this mode of reproduction is beautifully seen in the accompanying drawing. (See Fig. 8). Sometimes little granules or nuclei are seen in the interior of the spores. The tubes are very variable in diameter (from about the $\frac{1}{4000}$th to the $\frac{1}{1500}$th of an inch). On examining the hairs in this disease, many of them are found to be impregnated with the parasite, although not to such an extent as in tinea tonsurans. It is surprising that there are some dermatologists who yet insist on the non-parasitic nature of favus, notwithstanding the positive information which the microscope affords us. But all doubt as to the true cause of favus is set at rest at once by the results of inoculation of the favus matter, which has been practised very frequently of late,

FIG. 8.



Showing the mode of reproduction of the achorion.—(Bennett.)

and often with success—among others, by Bennett, Hebra, Remak, Vogel, Bazin, Gruby, and Deffis. Bennett thus describes a case in point:—"In the summer of 1845, one of the gentlemen in attendance at the Royal Dispensary volunteered to permit his arm to be inoculated. A boy, called John B., aged 8, labouring under the disease, was at the time the subject of lecture; and a portion of the crust, taken directly from this boy's head, was rubbed upon Mr. M.'s arm, so as to produce erythematous redness, and to raise the epidermis. Portions of the crust were then fastened on the part by strips of adhesive plaster. The results were regularly examined at the meetings of the class every Tuesday and Friday. The friction produced considerable soreness, and, in a few places, superficial suppuration. Three weeks, however, elapsed, and there was no appearance of favus. At this time, there still remained on the arm a superficial open sore about the size of a pea, and Mr. M. suggested that a portion of the crust should be fastened directly on the sore. This was done, and the whole covered by a circular piece of adhesive plaster about the size of a crown-piece. In a few days, the skin surrounding the inoculated part appeared red, indurated, and covered with epidermic scales. In ten days, there were first perceived upon it minute bright yellow-coloured spots, which, on examination with a lens, were at once recognised to be spots of favus. On examination with the microscope, a few of the cryptogamic jointed tubes could be perceived. In three days more, the yellow spots assumed a distinct cupped shape, perforated by a hair; and in addition to tubes, numerous sporules could be detected." (a)

FIG. 9.

Hair with favus fungus. A A A, chains of spores projecting beyond the edges of the hair; B, spores between the fibres of the hair. C D, broken up root-end of the hair, with masses of spores between the laminæ.—(Kölchenmeister.)

Of three cases inoculated by Deffis the epidermic variety of favus—the crusts exhibiting the achorion microscopically—was produced twice, and a typical favus cup once,—and the average period of incubation was ascertained to be about forty

(a) Clinical Lectures. Second Edition. P. 799.

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days. The true favus cups are only formed when by inoculation some of the fungus can be brought into contact with a hair-follicle, hence the epidermic variety is more frequently produced. Gruby also tried the effects of inoculation. He deposited some of the fungus on the bark of an oak in full vegetation, and there developed itself a favus cup identical with that which grows on the head of infants (b). Favus is a disease not uncommonly met with in the lower animals, and the following interesting case of transmission from a mouse to a cat, and from the latter to two infants, was communicated to Bazin by Mr. Draper, of New York:—"In the course of the year 1854 several members of a family, amongst whom was a young Physician, remarked that several mice, caught in a trap, were affected with a peculiar disease. Upon the head and front legs there were crusts of a sombre yellow tint, of a regularly circular form, and more or less elevated above the level of the neighbouring healthy parts. A manifest depression was likewise detected in the centre of each crust, just as one observes in porrigo favosa, and the parts, where these had fallen off, were ulcerated, and the skin appeared to be destroyed throughout its whole thickness. These mice were given to a cat which exhibited, some time afterwards, above the eye, a crust similar to those on the mice. Later still, two young children of the family, who played with the cat, were successively affected with the same disease, yellow circular crusts making their appearance on several parts of the body, on the shoulder, face, and thigh. The Physician who was summoned pronounced them to be cases of porrigo favosa" (c). Some of the fragments of the crusts were sent to Bazin, who detected the parasite with its characters well marked. These facts are surely sufficient to prove that favus is essentially a parasitic disease, and, moreover, that it is very contagious. Instances of its contagious nature are to be met with frequently in large Hospitals devoted to skin-diseases, such as the St. Louis. Patients affected with it communicate it to those next them, or to their play-fellows, unless great precautions are taken. One of the last cases of favus which I had the opportunity of seeing was that of a poor woman whose head was perfectly bald, her scalp smooth, dry, and parchment-like when pinched up, while here and there a cup-shaped favus crust was seen. This woman was accompanied by two children, both of whose heads were covered with lice, and the elder of the two had, in addition, well-marked favus crusts all over the scalp. There was no doubt that the mother, in this case, infected her child; and it appears to me equally certain that the infant would also have become affected in process of time had appropriate treatment not been adopted. This case forms a good example of the *predisposing causes* of favus, which I now consider. Age has considerable influence. Thus we find the disease generally in children; *more rarely in infants and adults*. Hence the probable reason why the infant above alluded to was not affected.

But the most powerful of all the predisposing causes is *dirtiness*. I know well that I am thus stating what is contrary to the opinion of many dermatologists who consider scrofula to be by far the most essential *predisposing*, and of others who look upon it as the sole *exciting* cause; thus denying altogether the parasitic nature of the disease. Now, it cannot be denied that the children affected are *often scrofulous*; but at the same time it is equally certain that they are *always dirty*. This accounts for the fact that favus is rarely, if ever, met with in the upper ranks of life; and, as Hebra remarks, no child, be it ever so scrofulous, will take favus, provided it is cleanly. Independently of the communication of favus from one person to another it may occur primarily, and this primary development is thus described by Hebra:—"It has long been known that the quantity and diffusion of fungous growths is immense, and that these, on account of their smallness and lightness, are carried in the air and deposited along with the dust. One requires only to desist from cleaning a glass plate or any other smooth surface for some time, after which many of these can be detected with the microscope upon it. . . . Since now such germs are everywhere present, it is evident they will undergo further development where a suitable soil for germination is afforded to them. . . . In order to further their development repose and a certain temperature and moisture are necessary. An example from every day life makes this quite clear. If one leaves an ink-bottle at rest for some time, there is soon a development of fungous matter to be seen, while this does not form if it is in constant use. The same is the case in favus. In cleanly, well-to-do people, as well as in children who receive a rational physical education, favus never makes its appearance, but only among persons living in dirtiness and misery, in whose cases the combing and cleaning of the hair is neglected" (d). The soil favourable to parasitic growth is thus afforded, and fungous matter deposited on the head along with the dust, takes root and germinates.

There are a good many dermatologists, and among them Devergie, who believe in the spontaneous generation of parasites on the bodies of persons in great poverty, who are thus obliged to make use of bad food, and who are very dirty. Devergie supports his opinion upon the fact that the parasitic affections of the skin are sometimes cured or at least disappear on using internal medicines. It cannot be denied that such cases do occur; but it can as positively be affirmed that they are very rare. And there seems no reason for doubting that some medicines, by changing the qualities of the blood, may act as poisons to the parasite, or, to use a milder expression, may change the nature of the soil which had previously been favourable to its germination. It seems quite absurd to suppose that there should be spontaneous generation of the lower any more than of the higher animals and plants,—for it is well known that in the latter no such thing takes place, and it seems to be very paltry reasoning to argue spontaneous generation of the former merely because (they being so small) we cannot follow the phases of their development so well as in the case of animals and vegetables higher in the scale. The powerful influence of dirtiness in the production of favus has already been mentioned, and, with all deference to the distinguished dermatologist just quoted, the spontaneous generation of the parasite ought *never* to be looked upon as an exciting cause of the disease *under any circumstances whatsoever*.

It will be seen, therefore, that I consider *the application of the parasite* either by contagion, by inoculation, or by transmission through the air to be the sole *exciting*, and *dirtiness* (especially in children) to be the sole *predisposing, cause* of this loathsome and hitherto incurable disease.

(To be continued.)

(b) "Traité Pratique des Maladies de la Peau," par Alph Devergie. Second Edition. P. 526.

(c) "Leçons Théoriques et Cliniques, sur les Affections Cutanées parasitaires," par le Docteur Bazin. (1858.) P. 119.

(d) "Allgemeine Wiener Medizinische Zeitung," for 1858. P. 12.

AN EXPERIMENTAL INQUIRY INTO THE VALUE OF INCISION OF THE CILIARY MUSCLE,

IN THE TREATMENT OF CERTAIN DISEASES OF THE EYE AND DISORDERS OF ITS ACCOMMODATION.

By JAMES VOSE SOLOMON, F.R.C.S.
Surgeon to the Birmingham and Midland Eye Institution.

(Continued from page 142.)

Case 10.—*Asthenopia—Incision of the Ciliary Muscles at a Right Angle with the Rim of the Cornea—Cure.*

Richard T., aged 11, healthy, admitted February 14, 1860, was treated during more than four months without relief, for asthenopia (weak sight) which was attended by constant aching pains in the globes (ciliary neurosis). The treatment included perfect rest of the eyes, out-door exercise, tonics, aperients, and astringent lotions.

On the 26th of June, he could read forty verses of the New Testament before fatigue ensued. At the date named, I cut asunder the ciliary muscle of the right eye at a right angle with the rim of the cornea without dislodging any of the vitreous. The operation had the effect of removing the pains in the globe and of strengthening the eye, so that the patient willingly submitted the left to a similar operation on July 17. No bad symptoms followed, and the eye grew stronger.

On the 21st of August, he reported that his eyes felt quite well, that he could read an hour, and perhaps longer if he tried. No pain in the eyes since the operation, unless the print he reads is very small.

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28th.—No pain. Has been in regular attendance at school. The boy occasionally attended for observation up to the end of October. He did not suffer a relapse, and was able to read as long as other boys at his school.

Case 11.—*Asthenopia—Incision of one of the Ciliary Muscles—Great Improvement.*

Betsy K. has suffered from asthenopia since childhood. On November 16, 1860, she stated her eyes became weak, dim, and subject to severe aching pains after reading for twenty minutes, and that a rest of ten minutes was necessary before she could see the print. The left ciliary muscle was cut asunder; the wound bled freely. On December 11 she could read with comfort for half-an-hour, and on January 18, 1861, for three or four hours without inconvenience.

I advised the patient to give her eyes regular and moderate work for three months, when, if not cured, I would operate on the right eye.

Case 12.—*Chronic Glaucoma—Intra-ocular Myotomy—Cure.*

Mrs. B., aged 40, was admitted under Mr. Solomon's care on March 31, 1860.

History.—Three years and eight months ago she was seized with severe aching pain in the right eyeball and temple, which extended to the head on the same side. The sight was abolished. She went to bed, applied vinegar to the lids, fell into a sleep, from which she did not wake till three o'clock the next morning, when all pain had ceased, and normal vision had returned. Similar attacks recurred about every month, and sometimes at rather longer intervals. At the time of the first attack she was pregnant. During her labour, which was hard, she became blind, and for three days could not open her eyes in consequence of the painful effect of light. In three months after her confinement her children took fever, and she herself suffered the prostration which accompanies that disease without having any of its other symptoms. At this time the eye became inflamed, the state of the vision was not noticed; but, at a month's end, having by accident closed her good (the left) eye, she discovered that it was blind. Her Medical man employed antiphlogistic treatment. The eye has now been blind three years. The left eye became affected for the first time fifteen months ago; she was then suckling a baby, which was nine months old, and she continued to give it the breast till it had attained the age of twelve months. The same train of symptoms affected the left as had done the right. Like it the sight often went away without there being any appearance of redness about the eye. She would lose it if she was overdone by her household duties, and recover it by repose. The eye became inflamed for the first time in December, 1859. For the last year and a-half she has used a double convex glass, but since December has not read much.

Present State.—The right eye presents the usual signs of chronic glaucoma, with opacity of the lens and stony hardness of the globe.

Left Eye.—Globe of stony hardness; cornea of normal curvature; its sensibility is below par; sclerotic white, like porcelain; ciliary vessels enlarged, tortuous, and pink; pupil much dilated and motionless; iris bright and convexed, so that the antero-posterior diameter of the chamber is diminished; area of the pupil and vitreous clear; with convex glasses small pica can be read, but it is not clear at any time.

Ophthalmoscopic Examination.—Optic disc devoid of pigment, not cupped, central artery very distinct, rather larger than normal; choroid congested, vitreous and lens clear. No pigment on the lens.

On the 10th of April intra-ocular myotomy was performed on the right, and on the 14th on the left eye, no aqueous or vitreous escaped. The incision in the muscle was not more than one-sixth of an inch long.

April 19.—The right globe had lost its hardness, and the vision of the left was more clear. The patient returned to Herefordshire on the 21st, and on the 3rd of May her husband wrote me:—"Both eyes have become soft, which, previous to your treatment, were hard and stony, vision is more distinct, the eyes are free from pain; she can see objects at a longer distance."

In a letter, dated June 17, and written by the patient to a friend in Birmingham, she states:—"My eyes are decidedly better, so much more clear, the mist through which I used to see objects has vanished away." Distinct vision and the ability to read and write has continued up to the present time, November 29, 1860.

Case 13.—*Typical Case of Chronic Glaucoma, with Retinal Separation—Intra-ocular Myotomy—Retrocession of Objective Symptoms, and Cure of Pain.*

Lucy H., aged 65, admitted May 15, 1860. She is stone blind, and has been so for eight months. The retinæ are not impressed by light however powerful. The globes are of stony hardness; the cornea rough and vascular; the conjunctivæ injected; pupils widely dilated; the lenses, which are opaque and green, are pressed near to the corneæ; anæsthesia of the latter membranes; irides of a dull leaden hue.

May 15.—Intra-ocular myotomy on both eyes: the incision caused a plenteous discharge of straw-coloured fluid.

18th.—Pains are greatly relieved; a little discomfort in the left; external congestion of eyes diminished.

25th.—Left globe is soft and devoid of pain. The patient says she took cold in the right eye on her last visit, since which it has been very painful. The cicatrix is projected with soft lymph. I re-opened and extended it; fluid streaked with blood flowed from the wound. There is a slight inversion of the lower lid, which was corrected by the insertion of a metal suture.

29th.—Right eye less painful; on the next day the pain had ceased, and the entropion was cured. The left globe has become hard, the tension of the right is moderate.

June 12.—The right globe is hard, the left is soft. The vascularity of the right is much diminished, and the corneæ are less hazed. The left is free from vascularity, and its cornea clear. The patient occasionally attended till the end of July, when the corneæ were clear, the globes free from vascularity, and of moderate tension, not soft. Vision as on admission.

When such cases as the preceding are treated by iridectomy, Graëfe recommends the operation should be repeated until the globe loses its tension. This poor woman received the whole of her treatment while an out-patient; otherwise, a more decided improvement in the ocular tension would probably have been effected.

Case 14.—*Ophthalmoscopic Signs of Acute Glaucoma without Abnormal Tension of the Globe, or Dilatation of the Pupil—Intraocular Myotomy—Recovery of Useful Vision.*

James B., aged 62, a shoemaker, temperate, a large man; phlegmatic; protuberant abdomen; prominent blue eyes; subject to rheumatic pains in joints since 20 years of age. Has worked very hard at his trade all his life, and worn spectacles the last fourteen years; was sent to me by my friend, Mr. Yates, Surgeon, of Paradise-street, on May 26, 1860. For the last fourteen days the right eye had been constantly dim; at night he sees sparks of fire. At first, a lot of gnats appeared to be flying before it. The pupil is not dilated, or the globe abnormally tense, the sclerotic is congested by numerous pink vessels. No pain in the eye. Can scarcely tell a woman from a man; does not distinguish the back from front of hand. Left eye good. Thinks his sight has been failing a long time; does not know whether he could read with the right eye before it became dim.

Ophthalmoscopic Examination of Right Eye.—Vitreous turbid. The retinal vessels are minute, of dark chocolate colour, and present numerous minute varicose dilatations, or apoplectic effusions. The optic disc is hidden by the turbid vitreous. Intra-ocular myotomy; free discharge of aqueous. On the evening of the operation the photopsy had disappeared.

29th.—No photopsy; vision is clearer; he can distinguish features with ease. Pupil dilated by the atropine, which was applied on the 25th.

June 5.—Progressive improvement.

12th.—"Big flies appear before the right eye;" sees very well with No. 20 double convex glasses (English), which render objects clear. The right is the best eye.

22nd.—Eye is stronger; light excites irritation in the operated eye.

July 6.—Left eye clear; right much improved.

August 14.—With twenty-four inch double convex large objects and features are clear to the operated eye.

24th.—Ophthalmoscopic examination. The retinal vessels are red, larger, more distinct and numerous than when examined on May 25. The vitreous is clear.

November 29.—The patient cannot read with the right

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eye; but with spectacles features and large objects are well defined.

October 11.—The optic disc is white, and œdematous-looking. Retinal vessels minute and short. Retina hazed.

Case 15.—Acute Glaucoma—Intra-ocular Myotomy—Cure.

Miss D., aged 53, residing at Edgbaston, sent for me on February 11 of the present year. The right eye presented the usual signs of acute glaucoma. The globe was hard, the pupil dilated, humours turbid; iris motionless, and of a dull slate hue; ciliary vessels congested, conjunctiva injected; superior lid very œdematous. She suffers severe tensive pains in the globe; corruscations at night.

Vision.—A mist covers all objects and prevents their definition; neither features or fingers are made out.

History.—The loss of vision and pain occurred on the 9th. For the last twelve months the sight has several times gone for a day and returned without treatment. From early childhood the patient has always required a strong light when reading, and for many years has worn convex glasses. The eyes have been much worked throughout life. General power has always been feeble.

At 4 p.m. I performed intra ocular myotomy. The incision was made just below the lower rim of the cornea, on a line parallel with the horizontal equator of the eye. After the evacuation of the aqueous humour the vitreous and iris continued dull, and vision was not improved. No vitreous was lost.

February 12.—The patient remarked, "I am in heaven as regards pain."

15th.—The globe is quite soft; humours clear; features are defined; external redness gone.

16th.—With the aid of her spectacles, can read a few words in an octavo Prayer-book, printed in bold type.

25th.—Can read the Psalms in an octavo Prayer-book without spectacles. The ocular tension is normal. The patient considers the eye to be as good as before it was inflamed.

Case 16.—Choroiditis of Six Months' Duration—Incision of the Ciliary Muscles—Cure.—(Reported by my friend and former pupil, Dr. E. L. Jacobs.)

J. W., aged 63, of Tipton, an engineer, healthy, came under my care, at the Eye Infirmary, on June 5, 1860. In January last he first became conscious of impaired sight in both eyes, with occasional flashes of light and clouds floating before them. His sight failed so that a fortnight before his attendance at the Eye Infirmary he could not see to walk by himself. On bright clear days the sight was better. When admitted he could not distinguish the features of any person across the room (four feet), though his vision would be a little better one day than another. Sometimes he could see to cut his food, at others he could not. He had never learned to read with fluency, but has worn reading-glasses for the past eighteen months. For the last six months small type has not been seen with sufficient distinctness to admit of its being read.

The left eye is much the worse; the pupils are not dilated; the ciliary vessels are enlarged, red, and numerous; tension of globe about normal; corneæ transparent.

Medical treatment was employed for six weeks without effect.

July 17, 1860.—I cut asunder the left ciliary muscle by an incision at a right angle with the horizontal equator of the eye; no loss of vitreous. At his next visit (27th) the photopsy was reported as cured and vision clearer. I therefore operated on the right muscle in precisely the same way as on the left. On August 7 the patient could recognise his friends' features and read as well as formerly. He has continued under observation up to the present time (February) without suffering relapse, except during a few days when he had diarrhœa.

The enlargement of the ciliary vessels has slowly decreased and is now nearly gone. The tension of the globe is normal.

Case 17.—Asthenopia Twenty-eight Years—Amblyopia Four Years—Near-sightedness Seven Years—Intra-ocular Myotomy—Clear Vision without Fatigue.

Mrs. E, aged 36, of florid complexion and good general health, came under my care on April 24, 1860. In her eighth year she had measles, which left an inability to read or sew, except for a few minutes at a time. Without the knowledge of her mother she wore her spectacles, which I find to be No. 10 double convex (English); with these she could work on minute objects with comfort. During the last four years, and especially the past twelve months, the vision has gradually diminished in vigour; and for seven or eight years she has been near-sighted (amblyopic myopia).

Present State.—The sight sometimes leaves the eyes for ten minutes, or a quarter of an hour; black spots float before them, but not constantly. No flashes at night or in the day. She cannot either read or sew, with or without spectacles. Features are said to be clear at four yards, dim beyond; at seven invisible. Bright objects occasion great distress; light and the movements of the globe (muscular contractions) excite pain. The eyes are softer than natural; pupils of medium diameter; tissues of normal appearance, except when examined by the ophthalmoscope, which reveals muscæ in the right vitreous, considerable dilatation of the retinal vessels of both eyes, and anæmic optic discs.

Treatment.—After eleven days of Medical treatment, both eyes were submitted to intra-ocular myotomy; the left on May 4, and the right on the 15th. In a week after the first operation the patient could tell the time by a large public clock at a distance of twenty yards, which previously she could not do. In a month she could sew and read with comfort. At the present time, November 30, 1860, she wears fourteen-inch double convex glasses, with which features are clear across the street, and the eyes are not distressed by reading and sewing even when long continued.

(To be continued.)

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

CONDUCTED BY

JONATHAN HUTCHINSON,

Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital,

AND BY

J. HUGHLINGS JACKSON, M.D.

A SUPPLEMENTARY REPORT ON PEMPHIGUS.

In the *Medical Times and Gazette* for February 11, 1854, we gave a Report on Pemphigus, in which the particulars of eighteen cases were adduced. As the disease is a very rare one, and from its peculiar features of much clinical interest, the following eight additional cases, which have come under our notice since the date referred to, appear worthy of publication. Several of them are, unfortunately, as regards treatment, incomplete, but one or two are, on the other hand, very definite in their teaching in this respect.

One of our conclusions from the facts contained in our former series was thus expressed, "That arsenic may be esteemed an almost specific remedy." The only source of fallacy was involved in the fact that the treatment pursued in most of the cases, although including arsenicals, had also comprised other drugs. Two of the following, however, treated under the writer's own care at the Metropolitan Free Hospital, were intentionally restricted to a purely arsenical medication, no change in diet being directed, and no outward application. They may, therefore, fairly rank as crucial demonstrations of the specific efficiency of that drug. The class of cases in which arsenic acts so well are those of chronic or relapsing Pemphigus. It occurs chiefly in children, and is by much the most common form in English practice. Still, although more common than the others, it is so rare that, in a very extensive sphere of observation, only one or two examples of it come under notice each year.

METROPOLITAN FREE HOSPITAL.

SEVERE CHRONIC PEMPHIGUS—SPECIFIC EFFICIENCY OF ARSENIC.

(Under the care of Mr. HUTCHINSON.)

Margaret M., a thin but fairly healthy-looking girl, aged 7 of brown complexion, attended in the out-patients room

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of the Metropolitan Free Hospital, January 27, 1860. Her parents were in comfortable circumstances, and she was well fed and cared for. Before the eruption appeared she was stout and healthy. The eruption began first in June, 1859, on the upper lip, and next spread over the face. It afterwards spread in large, accurately symmetrical groups of bullæ over the shoulders, arms, thighs, and legs, toes and feet. She attended at one of the largest general Hospitals during the months of August, September, October, and November, and for more than two months was an in-patient. She got quite well, but only remained so for a week or two.

Thus, at the date of her admission, the outbreak, which was the second, had existed for more than six weeks. The bullæ, which varied in size from a pea to a shilling, were scattered in groups on the shoulders, arms, thighs, legs, and feet. The patches on the two halves of the body were accurately symmetrical. Many of the bullæ contained opaque purulent serum. Others had collapsed and left their incrustations, which covered extensive areas of inflamed skin. The urine was stated to be at times thick and "like milk." The case was a severe one, and in a progressive stage. Although fairly healthy in aspect, the girl looked languid and oppressed, and her mother stated that she was very feeble and indisposed to exertion. The case seemed to be a fair one for the trial of arsenicals, and Mr. Hutchinson expressed a confident opinion that a very definite result would follow. Fowler's solution in two minim doses three times a-day was given, commencing on January 27. On February 3, six days later, the following note was made:—"Has not had a single bulla since taking the medicine. All the patches are nearly clear of scabs, and most rapidly healing." Again on February 10:—"She is now quite well. All the patches are rapidly resuming a healthy condition of skin, and are quite free from crust. No fresh bullæ have appeared, with the exception of two small herpetic looking vesicles on the upper lip. Her mother states that she seems better altogether." She continued the mixture until March 14. Three days later the eruption again broke out. There were only two or three small bullæ. On resuming the mixture they rapidly disappeared, and she remained quite well for five months. Her mother was warned that the disease would certainly relapse, and on July 10 she was accordingly again brought. She was stated to have enjoyed excellent health since the last attendance, but within the last four days a few bullæ had shown themselves on the right foot and left shoulder. No discoverable constitutional disturbance had attended this relapse, and a week's arsenical treatment sufficed for its cure.

February 22, 1861.—At Mr. Hutchinson's request she attended to-day for inspection. It is now six months since her last relapse. She is in perfect health. She had measles in August last, but no appearance of any of the old eruption since last July.

CHRONIC PEMPHIGUS.

(Under the care of Mr. HUTCHINSON.)

Elizabeth B., aged 5, was admitted on May 15, 1856. Her skin was of a brown, faded leaf tint. In general she was healthy, but when the rash was out her appetite became impaired, and she became feverish. She had been subject to it for four years. It generally came out in the spring and autumn, and also in very cold weather. The hands, feet, and legs were generally affected, but sometimes the thighs; never the trunk. On the present occasion it was in the feet and hands. Mr. Hutchinson prescribed a mixture containing doses of one minim of Fowler's solution and five minims of liquor potassæ, three times a-day. A week later she was better. There were very few fresh bullæ, and most of the old ones were disappearing. The child was not again brought to the Hospital.

PEMPHIGUS—TREATMENT WITHOUT ARSENIC.

(Under the care of Mr. HUTCHINSON.)

A. C., aged 14 months, was admitted August 29, 1856, for pemphigus. He was a well-grown child, of fair complexion. He was delicate before, but not ill. Since the eruption had appeared—one week before the date of admission—he had been feverish and very ill and lost his appetite. His face was swollen, and his mouth slightly aphthous. There had been bullæ in front of the neck, on the thighs, arms, etc. On the front of the neck were two very large bullæ, under which the skin had ulcerated. Mr. Hutchinson prescribed seven grain doses of the chlorate of potash, three times a-day, and the lotio zinci. On September 12, a fortnight later, the following note was made:—"All the places healed very quickly, and are now quite sound. He looks much better, is lively and cheerful, but sometimes fretful. He is teething." He did not attend again.

PEMPHIGUS.

(Under the care of Mr. HUTCHINSON.)

Elizabeth T., a healthy-looking girl, aged 4, was admitted March 6, 1857, for pemphigus. It was confined to the feet, and had left large scars in several parts. She had had it twice before, each time in February. Arsenic was prescribed, but the child did not attend again.

HOSPITAL FOR DISEASES OF THE SKIN.

CASE OF CHRONIC PEMPHIGUS.

(Under the care of Mr. STARTIN.)

Thomas McC., aged 3½. The eruption began to come out about a week before admission. The bullæ were on the face, about the mouth, and on the chest, back, and genitals. Some of the bullæ were as large as a shilling. He had suffered from disease of the hip-joint, and had had inflamed eyes, but had otherwise fair general health. He was stout, but pale. When the eruption was coming out he appeared very irritable, but continued to take food. On admission the skin was hot and dry; tongue dry and furred; pulse quick; bowels open. All the bullæ had now broken, and were bleeding from scratching.

The following case, like the preceding, is an additional fact in respect to the history of pemphigus cases, but, unfortunately, our notes do not enable us to add anything as to the result of treatment as the patient only came under observation on one occasion:—

CASE OF SEVERE CHRONIC PEMPHIGUS.

(Under the care of Mr. STARTIN.)

A. K., aged 11, a stout, well-grown boy, florid and healthy-looking, was admitted, under Mr. Startin's care, August 28, 1854. The attack was the first which he had had, and the eruption had only shown itself a fortnight before. The history given was, that he was habitually bilious and liable to headaches. On Friday, August 15, he had had an attack of bowel complaint. It was followed by sickness and much debility. The eruption showed itself on the Sunday following, and it came out about the nose and mouth. A week later some larger blebs formed on the knuckles. He was feverish and irritable and complained of his legs aching. At the time of admission his hands, arms, and feet were covered with bullæ, most of them about the size of sixpences; but some twice as large. The serum contained in them was alkaline. The boy had a quick and rather sharp pulse. His skin was hotter than natural. His tongue was whitish, and on the right side of its dorsum there was a patch denuded of epithelium, as if a bulla had been formed there. There was no history of rheumatism. He had been born in London, and had always lived there. His residence was not near to any river or stagnant water.

RELAPSING PEMPHIGUS—TREATMENT BY ARSENIC—CURE.

(Under the care of Mr. STARTIN.)

This patient, a delicate-looking boy, was brought to the Hospital with well-marked pemphigus, for which he had been treated and discharged cured. On enquiry of the mother, and by referring to the Hospital-book, the following history was obtained up to July 1859. The child had never suffered from any affection of the skin whatever, excepting an attack of measles the year before. With the exception of this attack of measles and the hooping-cough, no other special ailment had been noticed. The mother, however, stated that the child had always been rather delicate. The first attack of pemphigus took place in July, 1859. It was not (as far as the mother's statement can be relied on) preceded by any constitutional symptoms, nor was the outbreak attended by any pyrexia. The first bulla was on the skin of the leg below the right knee. It then extended in a few days to the thigh, groin, penis, and scrotum, and ultimately the whole of the back was covered. It was scattered more sparingly, on the face, arm, and rest of the body. She says that his health did not

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suffer from this attack any further than that, if anything, he was rather more delicate afterwards. He was under treatment for ten weeks at home, but the disease progressed. She then brought him to the Skin Hospital. Mr. Startin prescribed the mistura ferri acida of the Hospital Pharmacopœia, with liquor arsenicalis and tincture of opium. The lotio zinci was alone ordered to be applied with a brush. The lotio zinci contains oxide of zinc, glycerine, lime-water, and calamine. He was under treatment for three weeks, and was then discharged cured.

He was again admitted a patient of the Hospital on March 12, 1860. He had continued quite free from the disease until a week previous to the above date. His mother first perceived a spot on the inner side of the right thigh. He was then a little feverish, his appetite was impaired, and he slept badly and lost his spirits. The eruption gradually appeared in other parts. On admission bullæ of various sizes were found on the side of the knees, on the thighs, groins, scrotum, abdomen, and over the region of the deltoid muscle. The skin was implicated with a general degree of symmetry, though the bullæ were not quite opposite. They were of all sizes, from that of a split-pea to one as large as a halfpenny, and in various stages,—some containing clear pellucid fluid, and in others the fluid looked puriform, and the pustule flattened. The base of some of the larger ones was red and erythematous, but not hard. The tongue was very slightly furred, the appetite bad, nights restless, probably from the local irritation; no thoracic or abdominal irritation was present. The urine was examined, its reaction was acid, and it was found to become almost solid with an equal bulk of nitric acid, from the formation of crystals of nitrate of urea. There were no crystals of oxalate of lime found; chlorides abundant. There was after standing a copious deposit of pale urates. The fluid from the vesicles did not redden litmus-paper.

The treatment adopted was tonic,—iron, with arsenic, and small doses of opium. Aperients were directed to be given as required. The local treatment was the application of the lotio zinci of the Hospital Pharmacopœia. The sores were directed to be first cleansed by sponging with a little thin gruel, and then the lotion was to be applied by a camel's hair pencil.

March 15.—The child says that his throat is very sore; but there is no affection of the mucous membrane of the mouth. There is frequency in micturition, and the urine deposits urates copiously. There were now on the index finger of the left hand a cluster of vesicles. There was no erythematous redness. Another patch on the under surface of the left thigh was also noted; it was apparently in an earlier stage, and looked like a crop of papules, of a reddish coppery colour. Around one of the old places on the thigh was a crop of new bullæ.

April 30.—The child continued to take the mixture; and although fresh bullæ came out in every part of the body, still the disease gradually declined in intensity, and now nothingbut the stains of the eruption are left. The pulvis calaminæ of the Hospital Pharmacopœia was substituted with benefit for the lotion.

PEMPHIGUS — DURATION, FOURTEEN WEEKS—TREATMENT BY ARSENICALS—CURE.

(Under the care of Mr. STARTIN.)

Louis J., aged 36, was admitted on February 20, 1860, for well-marked pemphigus; the affection had then existed fourteen weeks. It first begun under the arms, near the axillæ, then in the flexures of the thigh, next on the scrotum, and ultimately affected nearly every part of the body. On admission, it was found on the parts above mentioned, and also on the face, lips, neck, chest, elbows, legs, popliteal spaces, and on the plantar and dorsal surfaces of the feet. It was also especially noted that the disease was very symmetrical. His health, he stated, was quite good, and if it had not been for the skin-affection he would have passed for a man in very good health. He had never had rheumatism. Arsenic was ordered with the mixture of iron as in the above case. He improved steadily until March 12, when he had a relapse; more bullæ had appeared, many in the chest and in the axillæ. He had given up taking the medicine. On resuming the arsenic he gained ground, and was soon well. He had remained well when seen some months after leaving the Hospital.

THE LONDON HOSPITAL.

CASE OF SEVERE CHRONIC PEMPHIGUS.

(Under the care of Dr. RAMSKILL.)

Arthur L., aged 5½ years, was admitted under the care of Dr. Ramskill, on May 2, 1860, on account of severe pemphigus. The eruptions were very copious near the anus, body, genitals, and thighs. There were also small vesicles on the face, and the upper lip was much swollen. His mother stated that the quantity of serum discharged was sometimes enought to saturate his bed. Some of the blebs had been as large as half an egg. The disease had first shown itself about two years ago, when it appeared in the back of the arm, soon after in the chest. The boy lived in Whitechapel. His parents were not very poor, and he had been well cared for. He had grey eyes and light-brown hair. His complexion was pasty and pale. The eruptions had often been well at periods of a month at a time, and then relapsed. When it was out he often complained of aching in the limbs. His mother thought she had noticed that it was worse in the warm weather, and that it always improved during the frost. Dr. Ramskill prescribed liquor arsenicalis in doses of a minim and a-half to be taken three times a-day. A rhubarb powder was also directed to be given at bed-time. The effect of the treatment was rapid and decided, and in about three weeks the boy was nearly well.

RELAPSING PEMPHIGUS IN A CACHETIC WOMAN.

R. R., a woman, aged 23, was under care, in one of the Physician's wards in the London Hospital in January, 1854. She had been five years married, was very pale, and stated that she had always been so since the age of 14. She habitually suffered much from dyspepsia. The disease had first shown itself three years ago, at which time she was living in a village in Suffolk. She had never been accustomed to eat much meat, and had never taken beer. The eruption had, she stated, generally been the worst in December or January. Her attacks had usually lasted about a month. The eruption was usually preceded by pricking pains, and she considered that she usually felt better while it was out, and soon after it had gone off, than she had done previously. On account of hysteria, etc., she had taken much medicine. The arms and chest have been the parts most frequently affected. She thought it had been worse during her latter attacks than during her first. When admitted, the rash was fully out on the right arm. She was very anæmic. At the date of the present notes treatment by quinine had been pursued about a fortnight without any material benefit.

YORK COUNTY HOSPITAL.

CASE OF PEMPHIGUS.

(Under the care of Dr. SIMPSON.)

[Reported by Mr. FREDERICK NEEDHAM.]

Mary F., aged 27, was admitted into the York County Hospital on October 19, 1854, for a severe attack of pemphigus. The history of the case was as follows:—About eight weeks since she was exposed to cold, and a few hours after violent itching came on in one thigh, and, on scratching this, a number of small red spots appeared. Of these she took no notice for a week, when large vesicles formed on the arms and legs. This was accompanied by febrile disturbance and intense nausea. She then applied to a Medical man, who prescribed remedies which somewhat relieved her. These she continued for ten days previously to her admission into the Hospital. The patient states that she has never been ill before, and that her circumstances have always been comfortable, and her habits temperate.

October 19, 1854.—There is seen on the arms, legs, face, and part of the trunk an eruption of bullæ of different sizes, varying from that of a pea to that of a filbert, and containing a thin, limpid serum; the bases are red and inflamed, though there is no surrounding blush. About the third day the patient has observed them to gradually become opaque, and sometimes of a reddish colour. After the lapse of a few days they sink down, and become thin brown scabs. Fresh bullæ appear by the side of these, and undergo the same changes; and they are thus seen on the same limb in every stage of development. The patient feels very weak. Her bowels are constipated. Pulse 95. Tongue brownish and dry. There

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are great thirst and headache. She was directed to take liquor potassæ, half-a-drachm, iodide of potassium, three grains, in one ounce of decoction of sarsaparilla, three times a-day, and two pills, consisting of equal parts of Plummer's pill and compound rhubarb pill every other night.

November 22.—She was slightly better, but fresh crops of bullæ appeared from time to time. She was then ordered syrup of the iodide of iron in half-drachm doses three times a-day.

December 7.—Much better. No fresh eruption has appeared.

January 10, 1855.—Much improved. Still taking the syrup.

January 31.—Still improving.

She left the Hospital on February 6, but was still to continue the medicine. On April 30 Mr. Needham saw the patient. The eruption had quite disappeared, but she was still weak and feeble.

UNIVERSITY COLLEGE HOSPITAL.

THREE TUMOURS IN ONE SUBJECT—ONE ON CRANIUM, ONE IN THE PAROTID REGION, ONE NEAR THE LEFT KNEE—ALL OF DIFFERENT KINDS.

(Under the care of Mr. HENRY THOMPSON.)

J. A., a tall, stout man, aged 45, was admitted into University College Hospital, under Mr. Thompson's care, December 19, 1860. There was no disposition to tumour of any kind known in his family, on either his father's or mother's side. He had had three or four attacks of gout. A fatty tumour on upper part of back was removed a year or two since, no obvious exciting cause for which was known. He attributes each one of his present tumours to injury.

1. Tumour on the head. A hard, and evidently bony tumour was to be felt on the postero-superior angle of left parietal bone, close to the position of the longitudinal sinus. It was the size of a large hazel-nut. Twelve years ago he fell, with the head downwards, across an iron rail, and struck his head in the position of the tumour and wounded the scalp. A few years afterwards he felt a small, "hard knot," which slowly enlarged, and of late had become painful.

2. A firm, elastic, slightly-moveable tumour, under the right ear, the lower lobe of the pinna being lifted up by it. It was rather broader then, but not so thick, apparently, as a full-sized chesnut. Six or seven years ago, he received a heavy blow on that spot from the end of a scaffold-pole. He was stunned for eighteen hours, and he was afterwards permanently deaf on that side. Four years and a-half later he first felt pains in that spot, and then noticed a swelling, which had increased in size since.

3. Above the left knee there was a fatty tumour, the size of an egg. Sixteen years ago he received a severe bruise at that spot, and one year after he observed a "small knot," which got slowly bigger until six months ago, since which period it has doubled in size.

January 4, 1861.—Mr. Thompson first removed the bony tumour, level with the cranium. It appeared to be fixed deeply in the skull, probably involving the entire thickness of the cranium. He then removed the tumour under the ear, turning upwards the pinna, and dissecting carefully the morbid mass from the deeper structures, with which the processes of it appeared to be interwoven. Lastly, the fatty tumour was turned out in the usual way.

The patient progressed very well, but suffered from an attack of gout in the great toe, within three days from the operation. He was discharged on January 25, to leave for the country. The wound on the head was still open; that in the neck had just closed, as well as that in the knee.

On examining the tumour under the ear it was found to consist of numerous long, spindle-shaped cells, or nucleated fibres, with spheroidal cells, also nucleated, and resembling young epithelium.

GUY'S HOSPITAL.

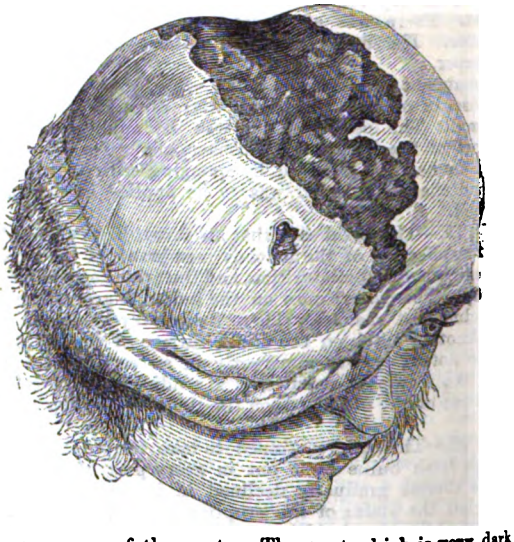
DISPLACEMENT OF THE SCALP AND OCCIPITO-FRONTALIS MUSCLE, AND EXFOLIATION OF A LARGE PART OF BOTH PARIETAL BONES.

(Under the care of Mr. HILTON.)

The following case is, we believe, almost unique. Mr. Hilton said that he had never seen a case of the kind before, and did not remember to have seen such a case recorded:—

William D., aged 64, was admitted on December 19, 1860. He was a strong, well-made man, and had always lived temperately. About eleven months before, he fell from some rigging on to a bar of iron, and sustained an extensive scalp-wound. This was dressed by a Medical man who, having cut away the hair from the surrounding parts, brought the edges of the wound together by strapping. The strapping, however, occasioning pain in the wound, the man, after keeping it on eleven days, took it off, and for more than a month nothing was done to it. Erysipelas then set in. He had repeated attacks, and was frequently for some time insensible. In May, 1860, he first noticed that the scalp on the right side was moving down. He says that his Medical attendant did nothing for it. About the middle of June a large piece of bone, about the size of the palm of the hand, came away. (This piece has a small portion of the inner table attached, and belongs to the posterior part of the parietal bones, having two parietal foramina in it.) From that time the scalp had gradually slipped lower and lower, leaving a large surface covered with granulations, in the centre of which space, the pulsations of the brain can be seen.

When admitted, there was a thick fold of skin which extended from a point about half-an-inch to the left of the nose, over the ridge of the nose, then resting on to the cheek, quite covering up the eye. It passed on to the middle line behind, depressing the cartilage of the ear. This fold could be lifted up so that the eye could be quite uncovered. The annexed woodcut represents very faithfully



the appearance of the parts. The part which is very dark on the vertex was an unhealed granulating surface. The part below down to the fold of skin was cicatrised.

The following is a brief extract from a clinical lecture by Mr. Hilton on the case:—"This man falls from a great height, lacerates the scalp, and bruises the bones of the skull. The portions of the scalp are brought in contact as far as possible and apparently maintained there. Subsequently the man neglects proper treatment, sloughing of the scalp follows, and then gradually the right half of the occipito-frontalis slips down. One of the great features in the case is the death of portions of the bone. Now although we know that the bones of the skull are repaired and receive their nutrition almost entirely from the dura mater, and that any injury of this kind on the exterior does not necessarily involve the internal parts, and experience has taught us that a very great exposure of bone upon the exterior of the skull scarcely tends to the death of the bone at all, yet we must remember that at the age of 64 the reparative power of Nature is not very strong."

Mr. Hilton believed that very simple means would have prevented the deformity. If the parts had been brought together the bone probably might not have died and the scalp would not have slipped. He related a case in which

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erysipelas followed an extensive scalp wound and was complicated also by two attacks of secondary hæmorrhage, which reduced the patient very much, and yet perfect recovery resulted with no loss of bone and little deformity. Mr. Hilton decided to remedy the deformity by removing the prolapsed fold. He thought it better to divide the operation into two parts, first to remove the fold over the eye, only so that the supply of blood might not be quite cut off from the scalp above. On turning up this flap it was found that the eyebrow was lying over the eye, the orbicularis palpebrarum having sunk with the surrounding tissues. He therefore turned up the part which was overhanging, and made an incision through the skin just above the eyebrow, and then on the other side of the fold another incision, so that when the rest of the fold was removed the eyebrow would fall down into the gap inclosed between the two incisions. The man recovered well from this operation, and at a subsequent operation Mr. Hilton removed the rest of the prolapsed fold. He was discharged a week ago, being able to raise the lid and close his eye. The granulations over the part where the bone had been removed still remained unhealed.

Medical Times and Gazette.

SATURDAY, MARCH 2.

VIVISECTION.

We have been requested to pronounce a condemnation of the practice of Vivisection. It is needless to say that all mutilations of living animals performed unnecessarily, or with the infliction of any suffering that can be avoided, are to be condemned without question. The point then arises, What operations of the sort are necessary and justifiable? We believe that if anyone competent to the task desires to solve any question affecting human life or health, or to acquire such a knowledge of function as shall hereafter be available for the preservation of human life or health, by the mutilation of a living animal, he is justified in so doing. But we do not hesitate to condemn the practice of operating on living animals for the mere purpose of acquiring coolness and dexterity; and we think that the repetition of experiments before students, merely in order to exhibit them as experiments, showing what is already known, is equally to be condemned.

A deputation of the Society for Preventing Cruelty to Animals visited Paris last year, in order to collect facts as to the alleged operations on living horses at Alfort and Lyons, and to put a stop to them if possible. We learn now, from the *Brighton Gazette*, that the Society is endeavouring to bring the matter prominently forward in this country. We doubt if vivisection, or experimental physiology, exists here in its objectionable form,—that is to say, the mutilation of live animals before a class in order to demonstrate experiments whose results are known already. On the other hand, if any profound and thoughtful physiologist choose to resort to living animals to determine questions unknown or doubtful, it can hardly be possible to prevent him, even if desirable. We believe it to be justifiable to try the effects of articles of food, medicine, and poisons on animals; to try the effect of new surgical operations, as Gooch did when he extirpated the rib of a dog before performing the same operation on a woman; to submit animals to new and unusual courses of diet, as was done by Majendie, when he demonstrated the insufficiency of gum, sugar, and gelatine as food; to perform on them experiments showing how disease may be caused or avoided, as was done by H. Lee in his injections of pus into the veins of the ass, by Gaspard and Cruveilheir in the same, by Herbert Barker in his experiments on dogs with cesspool air, by Küchenmeister and others on animals whom they made to swallow the embryos of tapeworms; by Richardson, when he demonstrated the production of endocarditis by the injection of lactic acid into the peritoneum; by Snow and John Chapman, when they poisoned animals with ether and chloroform, in order to discover the mode of death and best means of recovery; by Ludger, Lallemand, Perrin, and Duroy, when they subjected animals to poisonous doses of alcohol and chloroform for the same purpose; by Waterton, when he poisoned animals with *woorara*, in order to show the possibility of using it as a remedy for tetanus, and by Chossat in the experiments which demonstrated the influence of heat in retarding starvation. Let us add to these, the large series of experiments which have been made to determine the process by which bone is united, and by which ununited fracture may be made to cohere; the experiments on the healing of tendons after subcutaneous division, in order to show the source of the uniting medium, the tendency or otherwise to contraction, and the propriety or not of early extension after tenotomy; the observations made on the transparent parts of animals in which inflammation had been excited by wounds or injuries, in order to learn the essential nature of that process; the experiments made to show the process by which arteries are closed and blood may be stanched; and those recorded by Cohn, Richardson, and others, to ascertain the conditions under which fibrinous clots form, and are carried about so as to plug up various arteries, and thus to elucidate many cases of inexplicable illness and sudden death, and prevent the Physician from resorting to remedies which torment the patient but cannot benefit him.

Writing as we do in haste, and putting down such instances as present themselves to the memory without referring to our bookshelves, we have confined ourselves to instances in which animal life has been sacrificed in order to show how human life may be saved. We will not even allude to the large series of experiments by which the functions of various parts of the nervous system have been made out, or those by means of which, at the present moment, a great living physiologist is exploring its diseases. But granting that experiments have been made and repeated rashly and gratuitously, and denouncing, as we do, all mere objectless mutilation, yet we think the matter must be left to the individual conscience and to public opinion, and that any legal enactment would be merely adding to the number of useless Acts of Parliament. Perhaps the Society will interfere to prevent physiologists from experimenting on themselves; Simpson and his associates must be hindered from any such dangerous feats as those which led to the discovery of chloroform; and certain laborious experimentalists may be hindered from making vexatious experiments on their children and maid-servants to determine the quantity of carbonic acid expired under different conditions of diet.

PROGRESS OF PRACTICAL MEDICINE IN FRANCE.

We have on several occasions lately referred to the fact that French Doctors are beginning to learn that the administration of stimulants is of use in certain classes of diseases which affect the human body; and that with fear and trembling and astonishment at the results some of our Gallic brethren have been bold enough to administer such remedies even in febrile diseases. We may readily understand that such an antithesis in practice—a direct jump from leeches, bleeding, and cupping, and *eau sucrée*, to rum and brandy—should be a source of bewilderment to the Professional Body of France; for the fact is, notwithstanding railroads and telegraphs, the French Physician, as a rule, is totally ignorant of the practice of the English Physician. In some way or other, however, our stimulating method of treating some diseases has begun to find favour in the eyes of the Frenchman; but,

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in adopting this treatment, he appears to be perfectly unaware of the fact that it has been for many decades an ordinary mode of practice in this country. He thinks, in fact, that he has made a noble discovery. The enthusiasm with which this discovery has been received is indeed somewhat a surprise to the English Medical man. Dr. Borden, who has pointed out the hygienic and therapeutical effects of wine in anæmia and marsh fevers, has even gone so far as to demand the cultivation of the vine around every farm and every small village in Sologne; and, writes his critic, if his hopes be accomplished, misery and fevers will disappear from that country.

Dr. Jules Guyot also has a word on wine, which we recommend to the consideration of our total-abstinence men. Ordinary wine taken regularly with bread and other solid substances at meals is a precious aliment. The wine-growers say that a barrel of wine is worth a sack of wheat; and, in fact, two pounds of bread and two bottles of wine a-day are more nourishing, enable them to work better, than four pounds of bread and two quarts of water. Whether the fact results from an actual assimilation, or merely by nervous excitement, is a matter for the chemists; it is certain that the effect is constant and permanent, and so far from shortening life the wine diet actually prolongs it. Wine, says an old adage, is the milk of old men; and among vintagers, octogenarians, gay and robust, may be seen by hundreds.

Once more let us have M. Borden: Wine is good, *intùs et extrà*, for the health of the lymphatic, and the anæmic, and for those who are exhausted by fatigue or disease, as well as by age. The topical uses of wine have been too much overlooked,—its use in injection and in medicated drinks. The sweetened draught of wine given to the newly-delivered woman, is no barbarous custom; it may anticipate puerperal diseases; a drink of hot wine is often efficacious in curing sudden chills and colds; injections of warm wine were long the only cure of hydrocele; and the best injections in *fluor albus* and some affections of the womb are still made of Roussillon wine. Indeed, the only virtue contained in many of our drugs, resides in the spirituous vehicle which carries them. M. Guyot does not say that this vinous principle can be considered as a panacea for all diseases, but that wine and spirits are aliments, and hygienic, and that they assist in—and even determine—the cure of a large number of diseases he is certain. "I do not hesitate in declaring," he adds, "that they offer greater therapeutical resources than opium, quinine, and all other officinal bodies. They are rapid and powerful in action, and are aliments as well as medicines. A good glass of warm rum will cut short intermittent fever;" and of this the Doctor gives illustrations. Who, after this, will consent to be bled and purged, and otherwise tortured in his ague-fits? Quinine will cure your ague, it is true, all in good time, but *this* remedy will cut the cold stage short then and there. Follow up the commencing attacks with the hygienic draught, and you will soon tire cold ague out. He will recede before your well-directed and spirited artillery. What says the shade of Broussais to these heretical doctrines?

THE WEEK.

Lord Naas has introduced a Bill for the Uniform Registration of Births, Marriages, and Deaths in Ireland,—the only country in Europe, except Turkey and Hungary, where a system of registration is unknown.

The Lord Chancellor has introduced a Bill for the Better Management of Lunatics under the care of the Court of Chancery. The objects of it are, to lessen the expense of the disposal of their property, to restrain them from being led into a second Inquisition and much fruitless expense by interested persons, and to render more efficient the inspection by the visitors.

Colonel Sykes, in the Commons, put a question to the Under-Secretary for War, as to the grounds on which Dr. Thompson had been refused permission to appear before the Board of Examiners for Medical Appointments. No British subject was disqualified for any appointment by birth, colour, or religion. Dr. Thompson was the legitimate son of an Englishman, and of a lady with only one-fourth black blood in her veins. He studied first at the Medical College at Madras, and afterwards obtained the degree of M.D. at St. Andrews. On presenting himself for examination, he was told that the Service was no longer *local* (*i.e.* Indian) but general. He replied that he was willing to enter general service, and produced certificates of physical capacity; but in vain. The Government reply was to the effect that Indians of native parentage would probably be unfit for service in cold climates. There is fear lest the right of admission to the Indian Medical Service, which has for many years been conceded to the natives of India, will be virtually abolished by the amalgamation of the two armies. The writer of a letter to the *Times* says that this will be ruinous to many young natives who have been instructed in the Indian Medical Schools, and have come to Europe for further information. Happen what may to our rule in India, we ought to leave behind us the traditions of a sound Medical practice.

As we mentioned in our last number, Mr. Hubbard has got in the small end of the wedge, by which the present unjust assessment of Professional incomes in Schedule D. of the Income-tax may be reformed. Medical men ought to support Mr. Hubbard and petition Parliament. The distinction between permanent and precarious incomes, so obstinately ignored by Chancellors of the Exchequer, and so patiently submitted to whilst there were hopes that the tax would be temporary, must now be enforced loudly, for there is little doubt now but the tax will be perpetual.

We hear with very great regret that Dr. Francis Adams, of Banchory, died last Tuesday morning, of bronchitis, in his 67th year. His last paper "On the Roman Bath" was published in this Journal only three weeks ago, and his singular letters on Fœtal Auscultation also very lately. He was well known as the Translator of Hippocrates and Paulus Ægineta, and as the Editor of Aretæus, and was universally regarded as one of the most learned men of the age. Yet he died as he had lived, one of our "Gideon Grays," a country Doctor in a little village. He was a most excellent man, a scholar, and a gentleman. He lived in retirement, but he did his duty, and his name will live. *Bene qui latuit, bene vixit.*

In a circular addressed at the beginning of this year to every member of our Profession, the following announcement was made:—

"The encouragement received from a large and select body of subscribers—not only in the United Kingdom, but throughout the Colonies and in all parts of the world—leads to increased efforts to deserve success, and every additional subscriber is regarded as a means of adding to the value of the Journal. More expensive and more numerous illustrations, a more extensive foreign correspondence, and greater efficiency in every department of the Journal are attained as the Profession supply the reward for labour and outlay. If each subscriber would procure only one other subscriber from among his friends, and each society or book-club would take a second copy for its library, the circulation would be at once doubled, and means would be placed at the disposal of the Proprietors which would enable them to add very greatly to the value of the Journal."

A very considerable number of new subscribers having

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been added to the list during the last few weeks, raising the circulation to the highest point yet attained, the first effort we have been called upon to make in fulfilment of the above promise has been to organise "a more extensive Foreign Correspondence," and the results of these efforts are just becoming apparent. The letters we have lately published from "Our own Correspondents" at Hamburg and Bonn tell their own tale of the ability of the writers. To-day others appear from Hanover and Munich. A Travelling Correspondent who is visiting many of the German watering-places has already sent communications from Kissingen and Driburg; and others from the same pen and of equal interest will follow. We shall not only publish correspondence from Paris, Vienna, Berlin, and St. Petersburg, but also from almost every other centre of Medical Science in Europe and America. The newest discoveries in the practice of Medicine and Surgery; the therapeutical system of foreign countries, in many respects so different from our own; the experience of the most eminent foreign Professors and Physicians; the Hospital arrangements, and the whole *status* of the Medical Profession abroad, will thus be successively laid before our readers in the most agreeable and interesting form. We trust that this undertaking, which forms an entirely novel feature in Medical Journalism, will be received as a proof that constant exertion will be employed to make the *Medical Times and Gazette* more and more useful to our readers.

The Report of the National Vaccine Board to the Privy Council on their Proceedings for 1860, repeats the frequently-made assertion, that when small-pox occurs, and is even fatal among persons reported to have been vaccinated, it would be found that by far the larger proportion were either imperfectly vaccinated at first, or were vaccinated only in infancy or childhood. The Board, therefore, recommend revaccination in early adult age. In the same Report they boast of having supplied 219,490 charges of lymph in the course of the year. Supposing that three "charges" are used for one vaccination it follows that upwards of 70,000 persons have been vaccinated with dry lymph. It is the manner most uncertain, and most liable to produce deceptive results.

The second Lettsomian Lecture on the "Phenomena of Life," was delivered by Dr. Richardson at the Medical Society, on Monday the 18th ult. The subject, as announced, was the Calorific Process in Animal Bodies. Four propositions were introduced into this lecture:—1. That caloric is the primary source of motion in nature, and that it is, therefore, the source of life, in so far as motion represents life. 2. That the evolution of animal caloric takes place mainly in respiration. 3. That the combination of the oxygen of the air with the carbon of the blood, is due to the extreme distribution of the carbon over the capillary surfaces; and 4. That caloric is the primary source of animal motion, and is alone sufficient to restore muscular irritability. These points were all elaborated with great care, and many of the modern views, such as the view that the iron of the blood-cells is the carrier of oxygen for the production of heat in the systemic circuit, were closely combated. The last proposition was left for the concluding lecture of the course, which was given on Monday last. The lecture on this occasion opened with an experiment. An animal destroyed before the lecture hour by chloroform, was placed on the table, and a tube inserted in the aorta. Water of a temperature of 115° was then slowly injected, when the limbs underwent rapid and vigorous movement, as well as the muscles of the trunk and neck. So long as the injection was kept up, these movements were continued, and at the moment when the injection process was stopped to allow the lecture to proceed, they were as actively manifested as at any time. Passing to an explanation of these phenomena, Dr. Richardson, amongst many other points of interest, expressed that the nervous system is not a system of so many centres of power, with conducting cords in the nerves; but that, wherever there is nerve-fibre and blood, there is electro-nerve force made. The electro-nervous fluid is, therefore, statical, and is brought into play, not by current action, but by disturbance of equilibrium,—external impressions, or impressions of volition, or any other, that excite into action by an immediate communication with the universally-distributed force. The final section of these Lectures was devoted to the question, "What are the means for restoring animation after deaths in which no organic lesion is presented; such as deaths from chloroform, from drowning, and the like?" This point was discussed under three heads—Artificial respiration, Electrization, and Injection into the Blood-vessels of Various Substances; but the experimental research put forward, and the reasons for and against each and all of these methods, were so elaborate that we must reserve them for a special scientific article.

REVIEWS.

Clinical Surgery: The Surgical Diseases and Injuries of the Nose, Larynx, Thorax, with its Contents, and of the Organs of Circulation. By Thomas Bryant, F.R.C.S., Assistant-Surgeon to, and Lecturer on Operative Surgery at, Guy's Hospital. Part II. Pp. 78—150. London: 1860.

This appears to be a very useful work. It consists of a short commentary on the leading Surgical doctrines relating to diseases or injuries of the various parts mentioned; and of a series of cases selected from the practice at Guy's Hospital, which serve as illustrations.

In the part of the work before us, the author first treats of the cavity of the nose, and of foreign bodies, polypus, and ozæna; then of foreign bodies in the air-passages, of which accident he tells us that he has met with eight instances, in all of which tracheotomy was performed. In five the foreign body was expelled, and four of these terminated in recovery; in the remaining three, the foreign body could not be removed, and death ensued. In one case Mr. Bryant tells us the operation had been delayed too long, the child not having been brought to the Hospital till sixteen hours after the accident. In another, the larynx was not examined with sufficient care, otherwise, the foreign body, a piece of bone, might have been removed from the rima glottidis, where it was found after death; in a third, the patient might have recovered had the aperture been kept more open, so as to allow the intruding substance to escape, when at last it was dislodged. Such is a specimen of the clear and practical lessons drawn from the cases related.

We next meet with the subject of œdema glottidis, produced by drinking boiling water. Twelve cases are noted, all in children under three and a-half years of age. In two the injury was trivial; in nine tracheotomy was performed, with the result of saving five; in the remaining one the operation was unfortunately delayed, and the little patient died suddenly from an attack of spasm. This last case and its lesson are frankly and honestly given:—

"To my mind the lesson to be learned from the case, was not to delay the operation too long. If the case is not very threatening in its nature, but becoming worse, do not wait till the lungs and veins are all turgid with blood, and consequently are all disposed to inflammatory action, and are certainly not favourable to recovery, but operate at once, and thus put an end to the great risk of all these cases of œdema of the glottis, namely, spasm and sudden death."

Mr. Bryant notices the suspension after tracheotomy of the functions of those parts which usually close the orifice of the windpipe during deglutition. Speaking of one case he says:—

"Twelve hours after the operation, milk was first observed at the tracheal opening, and on many subsequent occasions the observation was repeated. In many like instances the

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same appearances have presented themselves, and it only remains to find an explanation of the fact.

"I well remember the alarm which such a symptom excited in the mind of a Surgical friend, when he first observed it, as the fear had passed through his mind that the œsophagus had been wounded during the operation, and that such a channel allowed the milk to pass through. This fear is, however, completely groundless, as repeated observation has convinced me of the fact, when no such error had been committed; and I believe the milk is allowed to pass simply because the epiglottis and glottis are so injured as to cease to act as valves, and have also by the scald become so blistered and thus insensible to impressions that a foreign body may pass without exciting any irritation."

If Mr. Bryant were to consult Professor Trousseau, who is perhaps the greatest tracheotomist in the world, he would, we believe, learn that after *all* tracheotomy—and not merely after tracheotomy performed for scalded glottis—the apparatus of deglutition becomes deranged; that the powers of swallowing and the closure of the orifice of the widepipe are both interfered with. In any such event, feeding by an elastic tube is expedient.

In cases of fractured rib, or other injury to the chest, with difficulty of respiration, Mr. Bryant does not hesitate to bleed; and expresses his firm faith in the virtues of antimony, given in the form of the wine in twenty or thirty minim doses every three hours. "The pulse becomes lower, the respiration less hurried and more easy, and the skin soon takes on a free action." Bleeding is less resorted to now at Guy's Hospital than any capital operation. Nevertheless, in cases of lacerated lung with urgent dyspnœa, Mr. Bryant "knows of nothing which affords equal benefit and which to the patient gives greater relief, or to the Practitioner greater pleasure. Bleed with no sparing hand; let the blood flow freely in a full stream, and as it flows the symptoms will gradually disappear." Arrest the flow when relief is obtained; but watch your patient, and bleed again, and a third time if need be; meanwhile, give antimony. "Few patients die from secondary inflammation of the lungs, when once fairly under the influence of antimony." Such are Mr. Bryant's sentiments on this important question; in reading which we feel that Guthrie and the Surgeons of the Peninsular War were justified in their depletory treatment, under similar conditions.

The chapter on injuries of the organs of circulation is very good, and we have marked several passages, but our space forbids insertion.

Dairy Stock; its Selection, Diseases, and Produce, with a Description of the Brittany Breed. By JOHN GAMGEE, Professor in the New Veterinary College, Edinburgh, etc. With Two Plates in Lithography, and Numerous Woodcuts. Pp. 316. Edinburgh: 1861.

THIS little work contains a full and readable account of the rules to be observed in choosing dairy stock, and of the several breeds, with their *points*, and their respective advantages; to this follows an account of the diseases of milch cows, which we venture to think somewhat imperfect, although, as the author says, his space forbids his entering into minute details. For example, our eye is arrested by the terms *red water*, and *black water*. We learn that in these diseases, certain elements of blood appear in the secretions, most commonly in the urine, but occasionally in the milk. It is interesting to learn that the disease is ascribed to "feeding on turnips that have been grown on damp, ill-drained land," that it is a malady to which the "poor man's cow" is particularly liable, and that a change to a good diet generally checks it at once; but it is provoking to find in the post-mortem appearances, no notice of the state of the kidneys. *Splenic Apoplexy, i.e.*, a thorough state of engorgement, and often rupture of the spleen, is noticed as an effect of too high feeding. The *Roman Bath* is recommended for cattle as well as for men, in fevers and other diseases of a malarious type, in certain skin diseases, and in bronchitis and other consequences of cold.

But we must pass over the various points in Mr. Gamgee's account of cow diseases, which are interesting to us who practise on man, and come to a topic to which he devotes a chapter, and which is also of great interest to us, although rather in a physiological than in a practical light at present. We say cautiously "at present," because there is no knowing what measures may be advocated hereafter, under the combined influence of refinement in human abdominal Surgery, and the desire to emancipate incorrigible offenders from all temptation to the "social evil." The chapter to which we allude is "On the Advantages of Spaying Dairy Cows." This operation, as is well known, has long been performed on domestic animals, when past useful breeding purposes, to relieve them from the œstrum, and enable them to fatten easily.

It seems that the present dairy system in towns entails great losses. "In a dairy, say of thirty cows, to keep up thirty good milkers, from fifty to sixty must be purchased annually, and this because a cow is dry on the average eight months after calving; and what with sickness and death, if a dairyman has regularly to supply the quantity of milk yielded by thirty cows when in full milk, he must purchase about double the number of animals every year. These animals are highly fed and confined; they are apt to sicken, become dry, and must then be sold to the butcher in very spare condition. Not unfrequently they are fed and fattened; but this requires care and time, which a town dairyman does not frequently allow his cows, and he therefore sells them at a somewhat reduced price. To secure a more advantageous sale, and that a beast may fatten more readily, she is served by the bull, and made to bear and to nourish a calf in her interior, which is a loss in beef to the extent of the weight of the contents of the uterus at the time the cow is slaughtered. A certain number of dairy cows become affected by œstromania; they are termed bullers, and cannot be stinted." The excited condition they are in is one ill-suited to favour the development of muscle and the deposit of fat, so that it is best to dispose of them soon. "A buller is sometimes a wild, difficult, and dangerous animal to manage, and never pays for keep." Charlier estimates that the yearly loss in France, owing to the lean and pregnant condition of the cow when killed, is nearly £700,000. "The spaying of cows is unquestionably the safest method to avert such losses. A spayed cow yields milk about twice as long, hence twice as much, as that given by a cow under ordinary circumstances. She fattens readily, laying on flesh from the time she is spayed, and very rapidly after she has ceased to give milk. The condition of a spayed cow contrasts most favourably with that of other cows in a town byre, and her flesh is of course tender and rich. There is no loss as by pregnant cows, and spaying is the only and safe preventive and sure means of cure for œstromania."

The common method of spaying, and that which must be adopted for heifers, is through the flank; but for cows that have already calved, Charlier suggests a safe and simple operation through the vagina. The hand is introduced into the vagina; the os uteri made out; then a guarded bistoury passed into the palm of the hand, with which a longitudinal incision is made in the upper or posterior wall of the vagina; two fingers passed within the peritonæum, drag out one of the ovaries, which is then seized by spring forceps, and its connexions crushed through into a metallic thumbstall. The other is treated likewise. We are assured that if healthy animals be chosen, neither in heat nor pregnant, and care be taken of their regimen after the operation, the mortality is not 1 per cent. That of the older method is stated to be 15 per cent.

Public Health. The Right Use of Records founded on Local Facts; Being Two Papers read before the National Association for the Promotion of Social Science, at Bradford, in October, 1859, with an Account of Subsequent Proceedings, etc. By HENRY WILDBORE RUMSEY, F.R.C.S., etc. London: 1860.

THE author of this pamphlet is well known as an indefatigable labourer in the cause of public health. In the present pamphlet he reproduces some of his ideas on the necessity for the more efficient collection of public records, and for the performance of other functions of superintendence of the public health, including vaccination, analysis of adulterated articles of food, and Medico-legal enquiries. Mr. Rumsey's opinions point to the necessity of some national or central supervision of local boards, and in this we quite agree with him.

RENEWAL OF BONE.—The Emperor Napoleon has added the sum of 10,000f. to that already offered as premium for the best memoir on the regeneration of human bone.

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PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

ON LACTATICS.

By Dr. A. K. GARDNER.

UNDER this title, Dr. Gardner, Midwifery Professor at the New York Medical College, designates the means capable of influencing the secretion of milk, and he arrays them under two heads—Galactics, or promoters of lactation, and Anti-Galactics, or opposers of lactation.

1. *Galactics* are again divided into Galactagentia, inducers of milk, and Galactagogues, expellers of milk. (1.) *Galactagentia.* (*a.*) *Liquid food*, as milk, good nutritious soups, ale or other malt liquors; spirituous liquors diminish rather than increase the secretion. (*b.*) *Fœniculum* has been lauded from the most ancient times, and is still much employed by the Germans. Dr. Gardner says that he has found great advantage attend the use of Hufeland's formula (Sem fœn., ʒj.; cort. aur., ʒss.; magn. subc., ʒiij.; sacch. alb., ʒij. M. Fiat pulv.—A teaspoonful three times a-day), the secretion having been in one of the cases suppressed for three weeks. (*c.*) *Ricinus communis and jatropha curcas.* Dr. Gardner does not seem himself to have used the leaves of the castor-oil plant, or of the jatropha curcas, and refers to the observations of Dr. Routh and Dr. Tyler Smith; but he says that other substances of the same class, vanilla and tonqua beans, have proved efficient in his hands. The former, when given in half-drachm or drachm doses of the extract, or when even used to flavour puddings, ices, etc., frequently exerts a marked effect, although not a very reliable one.

(2.) *Galactagogues* are articles which tend to promote the flow of the milk when secreted, relieving its retention. "Retention of milk may be caused by its becoming inspissated and thickened in its proper tubes by spasmodic stricture of the milk tubes, by acute inflammatory swelling thereof, or as the result of chronic inflammation of any number of milk-tubes near the nipple by closure of the aperture with obliteration of the canal, sometimes for an inch or more. These I have described in a former lecture, under the title of "Stricture of the Milk-Ducts and System of Sphincters or Muscular Fibres surrounding the Outer Terminus of the Reservoirs of the Milk Ducts at the Extremity of the Nipple." In this last case, medicines are insufficient, punctures of the tubes being necessary to remove the obstruction. As local applications, M. Ranques strongly recommends the following mixture:—Cherry-laurel water, ʒij.; ext. of belladonna, ʒij.; ether, ʒj. Velpeau states that he has found this sometimes useful and frequently of no avail. He himself recommends Sweet oil, ʒiij.—ʒij.; ext. bellad., gr. xvss.; ammonia, ʒj.; camphor, ʒss.; yelk of egg, gr. xxx.; ether, ʒss.; to be gently applied three or four times a-day. "It is my opinion that, although so many stimulating and anti-spasmodic embrocations, as those of ammonia and camphor, iodide of lead, and especially mercurial friction, are strongly recommended, it is very probable that warm fomentations of water, systematic frictions towards the nipple, and systematic pressure (by means of compresses and rollers, adhesive straps, or compressed sponge) properly employed and persevered in, do in most cases all the good that can be locally done, besides natural and artificial suction."

2. *Anti-galactics.*—These agents may be subdivided into two, Ischogalactics and Phygogalactics. (1.) *Ischo-galactics*, arresters or suppressers of milk. As general means against the excessive secretion of milk, diaphoretics, mild refrigerants, arterial sedatives, saline aperients, low or moderate diet, a sparing use of condiments and liquids, and avoidance of sexual excitement, are to be recommended. Lever and Kennedy found nauseating doses of tartar emetic valuable, and Stillé speaks highly of full doses of castor oil. The special ischogalactics are as follow:—*Belladonna.*—A great deal of evidence has been published in the British and American journals in favour of the efficacy of belladonna in drying up the milk. Still, some conflicting opinions exist, and the author, in judging from his own experience, "must deduce the opinion that, while it exerts no influence upon the milk already in the breast, it does in some cases, although not very apparently in all, tend to diminish or suspend further secretion. A mode of employment which I have found very effectual is smearing the watery extract thickly over the whole breast, and repeating the application immediately after washing off the previous one, drying carefully by compression, and removing by suction or otherwise as much of the milk at the time as possible, once or twice in the twenty-four hours; or a plaster made from a cloth or kid may be smeared with the extract, and may be applied partially or entirely, leaving a hole for the nipple, so as to allow of the breast being drawn or the child being applied." *Conium*, much employed by the ancients, has never been tried by the author, as he thinks it a somewhat dangerous application, likely to lead to atrophy of the gland. *Iodide of Potassium* has been strongly recommended by some French and German Practitioners, and Dr. Gaillard Thomas says of its employment in full doses, while the breast is painted around the nipple with extract of belladonna, "These two remedies have found great favour with the vast majority of those who have tried them; and, although I have seen them fail in checking, or even in diminishing the secretion, I have much oftener observed that benefit resulted from their use." *Sage*, used with advantage in a strong infusion by Van Swieten, has often since been resorted to with success. *Camphor.*—In answer to Dr. Stillé's statement that spirits of camphor is very successfully employed to suspend the secretion, Dr. Gardner says that his experience shows that camphor possesses no ischogalactic properties whatever. *Tobacco.*—"The effect of the ung. tabaci has been fully as marked as that of belladonna when employed as a plaster, as recommended for the latter. I have never seen any constitutional effects from it as is seen from the tobacco poultice upon the testicles, although the effect of belladonna similarly used is very marked upon the iris." *Peppermint.*—"The essence of peppermint, externally applied, is with many Practitioners in great favour for arresting the secretion. I have used it in many cases, and, while it failed in some, yet I am convinced of its marked efficacy. I have generally used it in the following proportions:—Ol. M. P., ʒjss.; Ol. ricin. ʒiijss.; Ol. bergamot vel jasmin, ʒjss.; camphor, ʒij. M."

(2.)—*Phygo-galactics* are articles which tend to disperse the milk accumulated in the lactiferous tubes, especially when it forms indurated tumours. Their action is supposed to be exerted on the system of nutrition, or specially on the absorbents. They are mercurials, the tincture of iodine painted over the breast, bromine, preparations of gold and silver, belladonna, conium, camphor, and chamomile. As to belladonna, though strongly recommended by many, the author doubts whether it possesses any phygogalactic as distinguished from its ischogalactic effect. That conium possesses phygogalactic power has been shown by D'Outrepont and others. It is possible that camphor may, as is represented by several authors, possess valuable phygogalactic properties, but the author has never derived much benefit from it, nor can he speak more decidedly in favour of chamomile.—*American Medical Times*, 1861, No. 2.

RELATION OF PUERPERAL FEVER TO ERYSIPELAS AND SCARLATINA.—The Registrar-General for Scotland says in his last Annual Report that, during the year 1860, there has been an unusual number of deaths from metria (child-bed fever), viz. 107; and as showing the close connexion between it and erysipelas—a connexion long since pointed out—the deaths from erysipelas amounted to the unusual number of 132. Ever since the Registration Act came into operation, this close connexion between these two diseases has been noticed; the prevalence and the fatality of these two diseases keeping almost exact pace with each other, and bearing to each other nearly the same general ratio. Thus, during 1858 there were 20 deaths from metria; 30 from erysipelas; in 1859 there were 34 deaths from metria, and 39 from erysipelas; in 1857, 51 deaths from metria, and 92 from erysipelas; in 1856, 71 from metria, and 101 from erysipelas; while during the past year, there were 107 deaths from metria, and 132 from erysipelas. The connexion between these two diseases and scarlatina has attracted less attention, but merits notice, inasmuch as during all the above-named years, the deaths from scarlatina, metria, and erysipelas, have either increased or fallen together; the years of the greatest mortality from scarlatina, being also those during which the deaths from metria and erysipelas were highest, viz. 1856 and 1860, and *vice versâ*.

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FOREIGN CORRESPONDENCE.

GERMANY.

HANOVER, February 16.

FEW of your readers will have heard of the small town of Grund am Hartz, which, until the last five years, was hardly known beyond its immediate neighbourhood, but which has since then attracted considerable attention on account of a new system of cure which has been tried there. It is romantically situated at the foot of the mountain Iberg, near Clausthal, in this kingdom, and because of its near vicinity to large pine forests, was chosen as a suitable spot for opening a "kuranstalt," and trying the medicinal effects of pine-leaves, about which there had been much discussion in France and Germany for several years previously. The establishment was opened in 1855, under the Medical superintendence of Dr. Brockmann; the number of visitors has since then steadily and proportionately increased each year; and more than 13,000 baths have already been given; a sufficient proof that the expectations which were entertained, have not been disappointed. Pine-leaf water-baths, pine-leaf vapour-baths, pine-douches, and pine-inhalations, are the chief external remedies used here, while at the same time the freshly-expressed juice of the pine, either alone or combined with aërated-water, or iron-water, or saline-water, or iodine-water, and pine-water are administered internally.

Patients suffering from gout and rheumatism, form a large proportion of the visitors. In cases of muscular rheumatism, pine-leaf vapour-baths are given, and pine-mud cataplasms applied to the suffering parts, which are also rubbed with the essential oil of the pine; besides which two to four ounces of pine-juice are prescribed once or twice a-day, for which, when the bowels are constipated, pine saline-water is substituted. In many instances the pain and other unpleasant symptoms are almost charmed away by this treatment in a very short time; but not unfrequently the applications have to be repeated. Rheumatic callosities also disappear rapidly, and in rheumatism of the joints an equally beneficial effect takes place, as well in cases in which the cartilages and ligaments are palpably changed, as in such in which there are no longer any structural lesions to be observed, and only the disturbance of function remains. The stiffness in the joints and the most considerable exudations in them either disappear, or are, at least, sensibly diminished after a short treatment. In gout the internal administration of pine-juice seems to be of chief value; this not only perfectly agrees with the stomach, but also restores the digestive powers, which in many cases are very much weakened. At the same time, however, pine-leaf vapour-baths were not neglected, and seemed to accelerate the cure. In some gouty patients, the latter caused a great excitement, with a frequent and high pulse, a profuse perspiration, and increased pain in the affected joints; such symptoms have to be considered as crises, as a great improvement always takes place after them; in some cases of very long standing, however, the excitement was so considerable, that great caution was necessary. In cases of gouty exudations in the joints, even in such, where the patients had for many years used the most powerful thermal baths without benefit, the success of the pine-treatment has been remarkable. Dr. Brockmann is of opinion, that these effects are not to be exclusively ascribed to the specific virtues of the pine-leaves, but also to the circumstance, that in most of these patients the long use of the thermal baths had induced a local weakness in the affected parts, which was unfavourable to a vigorous metamorphosis of matter required for the absorption of old exudations. This is the kind of cases in which the tonic and exciting properties of the pine-leaves exert most influence; the mode of treatment is as follows:—Pine-vapours and pine-leaf douches are employed; but the chief remedy is the pine-leaf mud, either as cataplasma, which is kept on during the night, or as a local bath, in vessels which have been specially constructed for the purpose, and are adapted to the suffering limbs. As soon as the stiffened limbs have, under this treatment, regained some mobility, slight gymnastic movements are resorted to, the limb being at the same time under the pressure of the mud; and, as the cure progresses, these exercises are gradually increased.

The pine-leaf treatment is equally beneficial in certain forms of sciatica, hernicrania, and in scrophulosis. It has also been tried in asthma, which is not dependent upon emphysema of the lungs or heart-disease. In some cases of this kind the pine-leaf vapours, in the vapour-bath as well as in the inhalation-room (or, as it is more emphatically called, the "pneumatic saloon"), produced immediately a very soothing effect upon the irritated respiratory organs; expectoration was induced, and the breathing became easier; and, after a while, the paroxysms also diminished in frequency. In other instances the inhalation of the pine-leaf vapours caused in the first few days the most violent paroxysms of asthma, so that the patients could only with difficulty be persuaded to continue the treatment; but after a time these fits grew fainter, and finally ceased entirely. The more violent these fits were in the commencement, the greater was the benefit derived from the treatment; and out of fifteen cases there was not one in which it proved quite ineffectual.

Cases of hysteria are also much improved, especially such patients as suffer from what is even now sometimes designated as "spinal irritation." Although most of these at first showed great reluctance to enter the "pneumatic saloon," they, after having once experienced the benefit of it, could only with difficulty be induced to leave it. In some cases of deep melancholia the effect of the vapour-baths was striking; fits of anxiety, which had before nearly overwhelmed the patients, were quieted by their use. In one case the catamenia which had ceased for many months, were re-established by the use of the vapour-baths; and this had such an influence upon the condition of the patient, whom her relatives had previously intended to send to a lunatic asylum, that she quite recovered her self-control, and could again participate in the pleasures of society.

Patients suffering from hysterical paralysis have also derived benefit from this treatment. Dr. Brockmann had lately a remarkable case of this kind under his care, in which not only the lower extremities had been paralysed for many years, but also both arms and hands had become totally useless, so that the patient, who was forty years of age, had to be fed like a child. Her case was complicated with bronzed skin, but whether there was any disease of the supra-renal capsules, could not be determined. It was, however, certain that the liver was out of order, and, therefore, the juice of millefolium, taraxacum, and gramen, was administered, together with pine-leaf vapour-baths and douches. After a few weeks the complexion had lost much of its darkness, and the upper extremities were so far improved, that the patient was able to feed herself. The year afterwards she again visited this establishment, and the complexion, the arms, and hands, were further improved; but no impression was made upon the lower extremities. In one case of paralysis, consequent upon an apoplectic fit, the internal administration of the pine-leaf saline water, together with the baths of the decoction of pine-leaves restored the use of the limbs to the patient.

In chronic catarrhs of the lungs, the pine-leaf vapours produced a marked alleviation. In most cases this was already felt during the first week of the treatment, and no patient of this kind left unrelieved. In catarrhs of the digestive organs other remedies were employed besides the preparations of the pine—viz., the juices of taraxacum, millefolium, belladonna, and digitalis, with favourable results. In leucorrhœa of the vagina the juice of the pine-leaf was given internally, and at the same time pine-leaf baths and injections of the extract of pine-leaf employed; and, although the effect was not immediate, they still caused relief.

This mode of treatment has also answered in consumption. In five cases, in which the disease was very far advanced, and in which anything like a cure could not be expected, the local symptoms were greatly alleviated, and the general health was improved. In cases of more recent standing, especially in such as were not of an erethic, but of an atonic character, of course, the treatment could be more energetic, and the success, therefore, more apparent. The chief benefit seems in such cases to be due to the inhalation of the pine-leaf vapours. By that the chest becomes more expanded, the muscles stronger, and the complexion more healthy, while the cough, the pain in the chest, and all other symptoms are much

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diminished. These effects are not of a transient character, as the patients when they returned to the establishment in the following year, were always much better than they had been at the beginning of the treatment, although not quite so well as on discontinuing it. It seems that the pine-leaf inhalations and baths are of the greatest use to such patients as have a disposition to tubercular disease, which by their use is destroyed. There can be no doubt that the soft and moderately moist atmosphere of the neighbourhood has also a share in the benefit which is produced.

Of skin diseases only a few cases have been treated here, and these were mostly psoriasis, pityriasis, eczema, and acne. One patient suffered from such terrible eczema of the face, that he was an object of the greatest repugnance to everyone who saw him, and he, consequently, scarcely ever showed in society. After a fortnight's treatment he was so much improved, that he presided, with general consent, at the table. In eczema, psoriasis, and pityriasis, the pine-leaf vapour-baths and mud cataplasms, were employed, while in acne the baths of the extract of pine-leaves proved most beneficial.

The effect of the preparations of the pine-leaves is partly local and partly general. The local effect is brought about by the remedy being placed in immediate contact with the suffering part, and is most evident if vapour-douches and inhalations are employed; less so by vapour-baths and mud-baths; and least by baths with extracts and decoctions. By these means irritation and hyperæmia of the capillary vessels is produced, with all its consequences; and diseases connected with an atonic state of the skin, the cellular tissue, and the mucous membranes, are improved or cured. The general effect, however, which causes the cure of chlorosis, gout, scrophulosis, and certain affections of the nervous system, is produced by the absorption of the essential oil of the pine-leaves into the blood.

MUNICH, February 20.

THE winter here has not been less severe than in nearly every other part of Europe. In the beginning of January the thermometer was as low as 13° F. below zero; but at the commencement of the present month the heartily-desired change in the temperature took place, and the last traces of the enormous masses of snow which had quite blocked up our thoroughfares and nearly buried our houses, have now disappeared. It is a remarkable circumstance, that neither the long-continued rains of last year, nor the late terrible cold, nor the present sudden change to a warmer temperature, have had any unfavourable influence upon the sanitary condition of the town, which has not for many years been so good as during 1860 and the commencement of the present year. The principal forms of disease have been, and still are, catarrhs of the respiratory organs, and rheumatism; and amongst the infantile population, whooping-cough and scarlatina, both of extremely mild character. The fact that typhoid fever (typhus abdominalis) has for the last twenty years never entirely left us, and nearly every two or three years has taken the form of an epidemic, has procured for Munich the reputation of having an unwholesome climate; but during the last two years this disease has steadily decreased, and with the exception of a small epidemic, which took place last autumn in the Convent of the Sisters of Mercy, a few cases only have recently been observed. Perhaps I may, in a future letter, give you some curious information about these Sisters as Hospital-nurses, for they are, unfortunately, here, as well as in Augsburg and Würzburg, entrusted with the care of the sick in the Hospital wards, and by their arrogant and insolent demeanour, even towards the Physicians, have everywhere caused no end of internal dissensions. At present I shall only give you an account of the epidemic just mentioned, which took place in their own convent. From June to the commencement of September last, only two cases of typhoid fever occurred there; but from September 19 to October 4, at a time when the Convent was inhabited by 120 persons, thirty-one persons belonging to the order fell ill in rapid succession, partly with gastric symptoms, partly with real typhoid fever. Fourteen were cases of typhoid fever, of which four died. This sudden and numerous increase of the sick-list took Medical men so much the more by surprise, as at that time the general sanitary condition of the town was excellent, and typhoid fever extremely rare. It was, therefore, almost certain that this outbreak had its origin in exclusively local conditions, and on a careful examination it was shown that the water used for drinking having been contaminated by putrid matter, was the cause of the epidemic. The local conditions were as follows:—The Convent of the Sisters of Mercy adjoins the General Hospital. In the Spring of 1860 a well was dug here, twenty feet deep. This well is distant only two feet from the wash-house in which the linen of the patients is washed, and it is surrounded by five sewers, which serve to collect the water flowing away from the wash-house. These sewers are connected with each other by means of canals, and the water contained in them gradually leaks into the surrounding earth. This water was muddy, had an offensive smell, and formed a considerable sediment; and as these sewers are only from twenty to thirty feet distant from the well, of course the earth being porous, the liquid contained in the sewers mixed with the water of the well. In order to prove this, the contents of the sewers and the water of the well were subjected to a careful microscopic examination by our excellent microscopist, Dr. Hessling. He found in the sediment of the liquid contained in the sewers all sorts of substances, both vegetable and animal, in a state of decomposition. Some of them were still distinctly recognisable in their primitive form, but by far the greater part was already detritus. This detritus appeared in flocky, dark-green coagula, and very small lumps, some of which contained anorganic matter, such as sand, grains of lime, etc., which seemed to form their nuclei. The liquid and the detritus both contained a large amount of carbonate of lime; and on adding some sulphuric acid to it, a very strong smell, as of foul eggs, was emitted, even from the small objects selected for microscopical examination; besides which newly-formed organic elements, algæ and spores, vibriones, monades and colpodes were observed, which whirled in rapid motion across the field. The water of the well did not form a sediment, excepting a few molecules; if, however, a few drops were examined under the microscope, the same elements were observed as in the water taken from the sewers, only—*sit venia verbo*—in homœopathic dilution. This was especially the case with the flocky coagula of detritus, the spores and vibriones. It was, therefore, proved that the water of the well had been contaminated with the contents of the sewers. Professor Pettenkofer, who made a chemical analysis of the water, found a far greater quantity of organic ingredients, of lime and of nitrates in it, than are contained in our usual drinking water. The water of this new well used to be conducted by means of a pump into a reservoir, which was situated under the roof of the wash-house, where it was used for washing. From September 17 to 28, last, when the epidemic began, it was conducted into the baths and the kitchen of the Hospital and the Convent by means of pipes, as, in consequence of the bath-house being in course of repair, there was an insufficient supply of water. Orders were given that it should only be used for the baths, for cleaning and cooking; while the necessary drinking water was furnished by two wells, which are situated in the court-yard between the Hospital and the Convent, and which are in a very satisfactory condition. But, although the inmates of the convent had thus been warned, it turned out, on close inquiry, that the water from the contaminated well, which was carried in the evening from the kitchen of the convent into the bed-rooms of the Sisters for washing, had also been used by them for drinking, and every one who had fallen ill acknowledged having drunk of this water. If it is taken into consideration that the beginning of the epidemic was synchronic with the drinking of this water, and that this contained putrid matter from the dirty linen of the patients, the supposition is certainly justified that the poisonous qualities of it were the cause of the typhoid fever, which is further proved by the circumstance, that with the discontinuance of the use of this water the epidemic also ceased.

The greatest regret has been felt, both at home and abroad, by the announcement of the death of the Nestor of German anatomists and physiologists, Dr. Frederic Tiedemann, which took place in this town, on January 22, last. Tiedemann had been Professor of Anatomy and Physiology at the Universities of Landshut and Heidelberg, and was far-famed, not only by his many acquirements and discoveries, but also through his academical teaching, which had extended over a long series of years. He was born on August 23, 1781, at Kassel, where his father was Professor of Philosophy at the Collegium Carolinum, which at that time flourished there.

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He took his degree at Marburg, in 1804, and soon afterwards became one of the private teachers at that University. In the autumn of 1805, in consequence of being recommended by Sömmering, then the chief authority in Germany upon anatomy, he received the Professorship of Zoology and Anatomy at the University of Landshut, and was, in 1816, called to Heidelberg as Professor of Zoology, Anatomy, and Pysiology. It was there that he not only published a number of works, but also became celebrated as a teacher. Amongst his pupils are many illustrious natural philosophers, anatomists, physiologists, and Physicians, both at home and abroad, several of whom have preeeded their master to the grave. His most useful and important work for the practice of Medicine and Surgery is his "Tabulæ Arteriarum Corporis Humani," which was published in 1822, and which, in point of magnitude, perfection, and practical usefulness is second to no anatomical plates which have ever yet been given to the world. The knowledge of the arteries, which is of such great importance both for the Physician and the Surgeon, has since then become easily accessible to the student, as hundreds of plagiaristic editions of Tiedemann's work, of every size, have been published in all parts of the world, and not unfrequently without mentioning the name of Tiedemann, to whom the editors were indebted for everything valuable contained in their books. In consequence of domestic misfortunes and illness, Tiedemann was, at a late period of his life, induced to leave Heidelberg. (Tiedemann's only son, who had taken part in the Revolution of 1849, was shot by order of the same Grand-Ducal Government which the father had so faithfully served for thirty-three years; whose University he had, by his name, rendered famous throughout the world, and to which he had on several occasions sacrificed great advantages which had been offered to him. He had, in fact, declined two calls, with much more liberal conditions than he was under at Heidelberg—the first in 1818, to the University of Bonn, which had just been founded, the other in 1833, to Berlin, where he was requested to fill the place rendered vacant by the death of Rudolphi, and which was afterwards given to Johannes Müller.) Thus Tiedemann left Heidelberg, which had been his adopted home for many years, and retired to Frankfort-on-the-Maine, where he was received with the greatest cordiality by many of his friends and former pupils. He lived there in great retirement, but still occupied himself with literary pursuits. On March 10, 1854, he celebrated his Doctor's jubilee, and a great festival was made for him on the occasion by his friends, while the University of Marburg, as is customary, renewed his diploma. In the summer of 1856 he left the hospitable town of Frankfort, and went with his son-in-law, Professor Bischoff, and his family, to Munich, where, on May 30, 1857, he celebrated his "golden marriage." (If a husband and wife have lived together for twenty-five years in Germany, a festival is celebrated by them, called the "silver marriage;" if for fifty, the "golden marriage;" if for seventy-five, the "diamond marriage." A case of the last kind recently occurred in a provincial town of Hanover.) In the summer of 1860, Tiedemann began to suffer from dropsy, from which he partly recovered, but this was followed by bronchitis, and an attack of pneumonia which supervened finished his life on January 22, last, after having reached an age of seventy-nine years and six months.

PRICKLY ASH.—In the *Journal of Materia Medica*, for October, Prof. C. A. Lee has an article upon the subject of *Xanthoxylum Fraxineum*. He says of it, "Though extensively used in domestic practice, in chronic rheumatism, etc., it has not been as much employed in regular practice as it deserves; for it is unquestionably one of our most actively medicinal plants, as its sensible properties very plainly indicate. As a powerful and permanent stimulant in languid, torpid conditions, especially in patients of a lymphatic, phlegmatic temperament, it deserves high eulogium; proving equal, if not superior, to guaiacum and mezereum." . . . "It seems to rouse the organic nervous agency in a marked degree, and in consequence, promotes the circulation throughout the whole capillary system: and this effect is not transient, like that produced by the more diffusible stimulants, as alcohol and camphor." . . . . "It is a powerful eliminant, exciting the whole secretory, excretory, glandular system, favouring metamorphic changes in the tissues, and acting as a general depurant."

GENERAL CORRESPONDENCE.

STATISTICS OF COMPOUND FRACTURE.

LETTER FROM MR. BRYANT.

[To the Editor of the Medical Times and Gazette.]

SIR,—In a short article in your last number calling attention to an excellent paper published by Mr. G. F. Cooper on the Statistics of Compound Fracture in St. George's Hospital, you refer in a complimentary manner to the statistics that I have from time to time published on different points from Guy's; and add, "that you are not quite clear as to their forming a perfectly continuous series, free from all selection of 'interesting' cases."

As this is an important element in estimating the value of any, and especially of statistical communication, I hasten to assure you and your readers that the statistics I have already published are not those of selected cases, but include all cases which have been preserved in the records of the Hospital.

Since 1853, the year in which a new system of registration was introduced into Guy's Hospital by my friend Mr. Poland, the records of every case admitted into that Institution have been preserved; and, as Registrar during that period and possessing personal notes of every case admitted, I have been induced to publish an analysis of the materials thus collected. This analysis forms the basis of my "Clinical Surgery," the second part of which has just been published. I am now occupied in the completion of the series, a work which must necessarily be one of time, and can assure you that no single case admitted (unless by mistake) has been, or will be, excluded.

Your opinion that a complete scheme of published statistics would be most valuable to the whole Profession, and is certainly due from our large Hospitals, coincides completely with my own views; and indeed, it is from such a feeling that I have been led, for the last eight years, to collect, and lately to analyse, the materials before me.

If other Hospitals would follow out the system, what a benefit would be conferred on Medical and Surgical science; and until they do, statistical information must necessarily be imperfect.

The system upon which I now act is one of great simplicity, and thus the labour of the task is considerably lightened. I shall be most happy to explain it to any of your readers who may be willing to carry out a like system.

I am, &c.

THOMAS BRYANT.

Wellington-street, London-bridge, February 18.

ON THE EMPLOYMENT OF CHLOROFORM IN LARYNGOTOMY AND TRACHEOTOMY.

LETTER FROM MR. HENRY SMITH.

[To the Editor of the Medical Times and Gazette.]

SIR,—There is one point connected with the interesting case of Diphtheria reported by Dr. Hillier which has particularly attracted my attention, and upon which I wish to make a few remarks. I refer to the employment of chloroform for the operation of laryngotomy. It is stated, "After a few inhalations, lying on the couch in the position for the operation, his appearance became most alarming. His aspect was just that of one dying from asphyxia; he was quite insensible, his knees smote together, the hands and feet were blue, the teeth set, the nose and lips drawn, and the limbs were contracted. The pulse was imperceptible."

The occurrence of this dangerous state of things in Dr. Hillier's patient confirms the conviction which I have for some time held, after a considerable experience of the operation of tracheotomy both with and without chloroform, that the use of this agent in cases of dyspnœa calling for the operation *suddenly* is not advisable, insomuch as the life of the patient is further imperilled, and the Surgeon is greatly embarrassed. I have in my later operations on this practice entirely given up the use of chloroform, and I have when the matter has been submitted to me by my professional brethren

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strongly advised that it should be dispensed with. The obstruction already existing in the windpipe, and the great congestion of the lungs and brain arising therefrom, seems suddenly to become much aggravated by the anæsthetic agent, and its noxious influence becomes so suddenly exerted, that the Surgeon is compelled to use the utmost rapidity for the purpose of preventing the patient being suffocated.

The case narrated calls to mind a similar scene occurring in my own practice. The late Dr. Theophilus Thompson called me to open the windpipe in an instance of acute disease of the larynx. Chloroform was carefully given; but after a few inspirations the most formidable symptoms appeared, and I shall never forget the consternation depicted on the face of my lamented friend, who as well as myself thought the patient was gone. I was, however, luckily able to open the trachea instantaneously, and after an anxious time we got the patient round, and he recovered; but I must confess I got such a fright that I determined not to use chloroform again in such instances. There is really very little reason why it should be used, for the patient who is about to undergo tracheotomy is in such a half-asphyxiated condition that he scarcely feels the knife; indeed, I have more than once operated in children for croup who have lain nearly still while the incisions were made; and in the last adult case, where the proceeding lasted at least ten minutes, it was quite extraordinary to witness the freedom from pain whilst the dissection was being carried on. Tracheotomy and laryngotomy are, very properly, employed now much more frequently than formerly; and it appears to me that this question of the use of chloroform in such operations is a very important one, and for this reason I have ventured to make these few remarks.

I am, &c.

HENRY SMITH.

16, Caroline-street, Bedford-square.

PATHOLOGY OF FEVER.

LETTER FROM DR. ROBERT D. LYONS.

[To the Editor of the Medical Times and Gazette.]

SIR,—I feel called on to make a few remarks upon the review of my work on Fever which appeared in your last impression. The author of that review sneers at me for retaining "synochus" amongst the types of fevers; but until I see better reasons than he has given,—and he has, in fact, given none at all for rejecting it,—I shall, in common with many able writers and Practitioners, continue to regard "synochus" as a distinct type of fever, very rare, no doubt, in our days, but still occasionally to be met with.

With respect to "relapsing fever" I cannot think that any fair and careful reviewer could have failed to observe that though it is accidentally omitted from the Category of Fevers at page 43, a special section has been assigned to it, with a heading in large capitals, and that several pages are devoted to the description of the disease, exhibiting it as a quite distinct type of febrile action.

I pass by the criticisms of your reviewer upon my chapters on Typhus; these censures I leave to the judgment of the practical Physicians of England, Ireland, and Scotland, from the already published evidence of many of whom we may learn that in typhus proper, delirium ferox is no unknown complication.

In conclusion, and it is for this reason principally I have desired to address you at all on the present occasion, I am anxious to state that if I have not mentioned the names of Drs. Jenner and Parkes, it is because I have not any where entered, in the work, on the consideration of the subjects specially elucidated by those able observers. The names of these gentlemen stand far too high to require to be dragged into notoriety—*à propos des bottes*—by me or anyone else, when their works are not specially in question. Had the book assumed the dimensions I originally contemplated, and which it will yet probably reach, it would be impossible for me to pass by the names of my valued friends Drs. Parkes and Jenner.

Finally, allow me to remind your reviewer that as we learn from Homer that the siege of Troy was pretty well advanced before the arrival of Neoptolemus, so the regeneration of the pathology of continued fever can be very readily proved to have been pretty fully accomplished before the (still recent) arrival upon the scene of that author whose name, with less of modesty or discrimination than might be, is placed before that of Parkes upon the extemporised bead-roll of immortality which concludes the review.

I am, &c.

ROBERT D. LYONS.

Dublin, February 26.

POOR-LAW MEDICAL REFORM ASSOCIATION.

LETTER FROM MR. GRIFFIN.

[To the Editor of the Medical Times and Gazette.]

SIR,—Again I must crave your indulgence for space to inform the Poor-law Medical officers that a Select Committee of the House of Commons, appointed to inquire into the "Operation of the Laws relating to the Poor," etc. has been appointed (see *Times*, February 23, page 8). I, therefore, trust all who can give evidence on the present iniquitous system of the Medical relief of the poor, will not fail to tender their evidence, and do their utmost to improve the laws which now inflict much cruelty on the poor, and are so grindingly oppressive to the Medical Profession.

I have addressed a letter to the Chairman of the Select Committee on Poor-law Administration, House of Commons, requesting to know where I may attend to give evidence; if my Medical brethren will do likewise, I have little doubt they will receive all necessary information; but no time should be lost. On the first of this month Mr. Serjeant Pigott wrote to me in respect of our proposed Bill as follows:—"Mr. Villiers' Committee is just the opening you require, and the evidence of all the matters related in your preamble would be received by that Committee. After their report the field for legislation will be well prepared." I regret I cannot guarantee the expenses of those gentlemen who may come to town, as some of my friends have of late grown rather penurious, and the funds will not permit it; but I believe the Select Committee will pay something.

I have this day received a letter from Dr. Bissett Hawkins, kindly enclosing a cheque for £5, "towards defraying the expenses of the proposed application to Parliament," and I have also received within the last two months about seventy subscriptions from Poor-law Medical officers. I wish I could say 700 instead of seventy, for then I should be in a position to print a large mass of evidence, and send it to each Member of the House of Commons, and thus have ensured a thorough knowledge of our grievances. I am, &c.

RICHARD GRIFFIN.

12, Royal-terrace, Weymouth, February 26.

INFANTICIDE.

LETTER FROM MR. BRINSLEY M. WALTON.

[To the Editor of the Medical Times and Gazette.]

SIR,—In your Journal for January 26 was a communication by J. Carson, Esq., M.D., bearing on the subject of infanticide. Inasmuch as a more remarkable case than the two related by that gentleman came under my notice a short time ago, I venture to beg a corner of your paper for it, as the importance of having these cases well substantiated cannot be over-estimated. Its perusal may be a warning against too hasty judgment where the patient might be unmarried, no preparations for the birth have been made, and the motive for infanticide probably apparent.

A most respectable married woman, mother of ten children (all easy labours, with nothing unusual to remark, except that the period of gestation never exceeded eight months), summoned me on one of the coldest nights in January. The patient, feeling a desire to micturate, got out of bed to the utensil. Without the slightest previous warning, she had a sudden but not severe labour pain, and twins with placentæ were born. On my arrival, fifteen or twenty minutes after, I found the twins, each with placenta attached, lying on the floor, barely covered with a bit of flannel. One child cried vigorously; the other, though alive, was cold and scarcely breathing. Artificial respiration, warmth, etc., enabled them to live a few hours, notwithstanding the being nearly drowned

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in the chamber utensil, the exposure to a temperature of about 22° Fahr. after leaving one of 100°, and their premature birth (6¾ months, according to the mother's statement). The mother recovered without any untoward symptoms.

I am, &c.

Brinsley M. Walton, M.R.C.S.L., L.S.A.

Hurstpierpoint, Sussex.

REPORTS OF SOCIETIES.

EPIDEMIOLOGICAL SOCIETY.

Monday, February 4, 1861.

Dr. Babington, President, in the Chair.

Dr. Bryson read a paper on

THE RECENT INTRODUCTION OF YELLOW FEVER INTO PORT ROYAL, JAMAICA.

After some introductory remarks with reference to provisions and other stores on board ships-of-war, to the manner in which these are stowed in the hold and in other parts of the vessel, and to the general condition of the decks, etc., Dr. Bryson commenced the subject of his paper by stating that H.M.S. *Icarus* was commissioned at Sheerness on the 23rd of November, 1859, for service within the tropics. Early in January, 1860, the *Icarus* sailed from England, and arrived on the West India station in February. After visiting several ports in the Gulf of Mexico, the *Icarus*, early in June, was at Port au Prince, in the Island of San Domingo, for three days, when she left for Port Royal, Jamaica, where she arrived on the 16th of the same month. On the 21st of June the *Icarus* again put to sea, and anchored at the island of Ruatan, off the coast of Central America, on the 27th. On the passage between Port Royal and Ruatan the first case of yellow fever occurred on board the *Icarus*, the subject of it being an officer, who had led an irregular life while ashore at Jamaica. He was attacked on the 24th of June, and died in three days. Port Royal and Kingstown, the only towns he visited in Jamaica, were, with the exception of sporadic cases, reported to be free from yellow fever. The disease in this case, according to the Surgeon of the ship, one of the most intelligent officers in the service, was clearly contracted on shore. Leaving Ruatan on the 28th of June, and having again visited Port Royal, the *Icarus* returned to the Bay of Honduras, frequently anchoring and remaining a day or two at Belize, Ruatan, Truxillo, and other places on the coast. On the 14th day of August, after having been at anchor at Belize for three days, she sailed for Truxillo, where she arrived on the 20th, and three days afterwards the second case of yellow fever made its appearance, but, as eight weeks had elapsed since the death of the first, the one could have had no possible connexion with the other. Whether the patient had been on shore at Belize is not mentioned; but this case, which happened on the 23rd of August, was followed by others on the 27th, 28th, and 30th of the same month. Cases of a less severe character continued to occur up to the 16th of September, when the attacks became more frequent and more severe. Truxillo, where the *Icarus* was at this time at anchor, was free from yellow fever; but at Belize, which she had just before left, that disorder had been raging with great severity, and had, within three weeks, carried off 30 per cent. of the white population. The *Icarus* had free communication with the shore at Belize, where, doubtless, she contracted the disease. On the 29th of September the *Icarus* left the coast of Honduras, with many sick on board, and reached Port Royal, Jamaica, on the 9th of October. By this time, however, out of a crew numbering 120 persons, 82 had been attacked by the scourge, and 32 had succumbed to it. The worst cases were as speedily as possible removed to the Naval Hospital, Port Royal, where five others subsequently died, raising the total mortality to 22 per cent. of the total number attacked. Notwithstanding the virulence of the fever, and a loss of more than a fourth of the whole ship's company, it may be said that, up to this period, there is no absolute and incontrovertible proof that the disease possessed infectious properties; because, according to the views of those who deny that yellow fever can be propagated by infection, it may be presumed that its invasion of the *Icarus* was due to some noxious agent in the ship or to an epidemic constitution of the atmosphere. Indeed, causes of the most extraordinary kind have from time to time been adduced to explain away the eruption and spread of yellow fever. When the *Icarus* arrived at Port Royal the inhabitants of the town, the troops in the barracks, and the crew of the stationary ship, the *Imaum*, in fact, the entire community for fifty miles round, whether on sea or land, were, and had been for many months, in a state of good health, although, as previously noticed, sporadic cases of yellow fever were occasionally occurring among new comers. The sick of the *Icarus* were conveyed from that ship in a pinnace sent from the *Imaum*, the crew of which also assisted the patients out of the boat and across the esplanade to the Hospital. On the following day, October 10th, the same boat's crew took the convalescents to the Hospital, and the remainder of the crew of the *Icarus* who had escaped the fever to the *Marianne*, quarantine hulk. On the 11th, the same boat's crew were further employed in removing personal baggage, dead men's effects, and other articles, from the *Icarus*, preparatory to her being cleared out. While engaged in these duties on board, twelve out of the fourteen boys composing the crew went below to avoid a heavy shower of rain, while the other two sheltered themselves under the boom boat on the upper deck. On the 14th, or three days afterwards, as might have been expected, and was indeed predicted, one of the boys who had gone below was attacked with fever in the morning, and another in the afternoon of the same day. On the next day six men were attacked, and on the day following three others. All of these lads were sent to the Hospital, where most of them died. Notwithstanding even the lamentable results to the crew of the *Imaum's* boat, had the fever ceased here, it might still have been contended, by those who believe that yellow fever is solely due to terrestrial or atmospherical causes, that proof of infectious propagation was still wanting, for the boat's crew had all been on board the *Icarus*, and had there been exposed to the same cause or causes which had acted with such destructive force on the crew of that ship. By an easy effort of assumption, the attack of the *Imaum's* boys might (in the absence of further evidence) have been referred to local agencies in the hold, or in the surrounding atmosphere. Unhappily for those who, subsequently to the events just narrated, fell victims to the disease, but fortunately for the cause of truth, the progress of the fever did not terminate at this point. On October 17, one of the *Imaum's* crew, who had not been on board the *Icarus*, although he had come in contact with some of her officers and their baggage on shore at the dockyard, was taken with yellow fever. On the 19th, four men from the *Imaum* were seized, and on the 21st two others. Several of these men were what is considered fully acclimated, and had not been out of the ship for some time previously. Soon the fever spread over the whole ship, attacking indiscriminately the old and the young, the acclimated, and the non-acclimated, until the cases amounted to 38, of which 17 had a fatal termination. Meanwhile, there being but little communication with the troops in barracks and the crews of other vessels in the harbour, these hitherto had entirely escaped the disease. Some may be disposed to say, "It is not quite clear how the fever got aboard the *Icarus*;" but there can be no doubt as to its introduction into the *Imaum*. And as if further, if possible, to determine its communicability, and the necessity of adopting proper measures of isolation and segregation in such cases, it can be shown that the disease was also propagated to the crews of two other ships of war in Port Royal, the *Hydra* and *Barracouta*. The *Hydra* was lying at Port Royal when the fever-stricken *Icarus* arrived, and she immediately sent a boat with an officer and crew on board of her. The *Hydra's* boats were subsequently employed for two nights rowing guard around the *Icarus*. What direct communication there was between the two ships, beyond the boarding of the boat's crew, has not yet been ascertained; but on October 12, or three days after the arrival of the *Icarus*, a case of yellow fever occurred in the *Hydra*. On the following day (the 13th) the *Hydra* sailed for the coast of Central America, and on the 14th the officer who had boarded the *Icarus* was the next seized. The fever now spread generally throughout the ship, and in the course of about a week she returned to Port

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Royal, having, during her absence, lost five of her crew, and a number of cases were still under treatment on board. With every appearence of the fever increasing if she remained in the warm latitudes, the *Hydra* was despatched to the northward, and she reached Halifax, Nova Scotia, on November 13, without a case on board, having, however, lost three more of her crew on the passage. With respect to the *Barracouta*, on October 19 she arrived at Port Royal from the Havannah, with her crew in good health. On the 24th of the same month 103 supernumeraries—young men and boys belonging to the *Imaum*—all recently from England, and two persons who had been under treatment in the Naval Hospital, Port Royal, for dysentery, were sent on board of her, that they might be removed from a locality that had now become unsafe The supernumeraries were enjoined to hold no communication with the ship's company, and were separated as much as possible from them, on the supposition that the former might have brought with them the germs of the fever in their clothes or baggage. Two days after the *Barracouta* left Port Royal on her way to Bermuda, two men presented themselves with decided symptoms of yellow fever, one of them an engineer from the *Imaum*, the other a boy belonging to the *Barracouta*. The next day (October 26th) two boys who had also come from the *Imaum* were attacked. On the 27th two of the *Barracouta's* men were likewise taken with fever. It being now evident that the disease had in reality invaded the ship's company, there was no longer necessity of keeping them apart from the supernumeraries. On the 28th the vessel arrived at Bermuda, but the civil authorities, dreading a reintroduction of yellow fever among them, refused permission to land the sick. Supplies of fresh provisions and of medicines, and other necessaries, were, however, sent on board. The *Barracouta*, therefore, sailed for Halifax on November 5, but being overtaken, on the afternoon of the same day, by a violent storm which blew down the hurricane-house erected on deck for the sick, and thus exposed these sufferers to the wind and rain, it was most judiciously resolved, after ten days' labouring in a heavy sea, and the ship drifting rapidly to leeward, to shape a course for England, rather than hazard running back into the tropics, where the fever would, in all probability, have broken out with renewed force. On November 25, the *Barracouta* arrived at Spithead, with only a few convalescents under treatment. "It is thus," concluded Dr. Bryson, "as clear as any evidence can well make it, that the crew of the *Icarus* brought the yellow fever into Port Royal; that she infected the boat's crew sent from the *Imaum*, and that the *Imaum's* boat's crew next infected their shipmates, who had previously been in perfect health. In like manner, the *Icarus* communicated the disease to the boat's crew of the *Hydra*, who also subsequently infected their shipmates. Next, the crew of the *Barracouta* were infected by the supernumeraries sent from the *Imaum*. Thus from one central focus, and within the space of a few weeks, was the yellow fever radiated in three distant and distinct directions, establishing at each point a fresh *nidus* of infection, capable of propagating itself to all susceptible persons coming within the sphere of its influence, and contributing another unequivocal and conclusive proof of the communicability of the disorder."

Dr. Milroy could not, after hearing such a history as that detailed in Dr. Bryson's paper, come to any other conclusion, than that the infectious nature of the fever had in the cases narrated been fully established. He considered that Bancroft, and those of the same school were altogether wrong in rejecting unconditionally the doctrine of the infectious communication of yellow fever. Far from going along with them, he believed that the timbers of a ship could be so imbued with the *materies morbi* of yellow fever, as to be capable of giving rise to that disorder for a considerable time after a sick crew had left the vessel. "During the last ten years," continued Dr. Milroy, "there have been many outbreaks of yellow fever in the naval squadron on the West India Station; and it was, therefore, desirable to know, if everything that could be done had been done to avert, or, at all events, to mitigate the ravages of such a scourge. He alluded more particularly to the overcrowding of crews on the lower decks of ships, instead of dispersing them, when in their hammocks, over the ship. It appeared from Dr. Bryson's paper, that boys—most probably unacclimated—were sent from the *Imaum* to board the *Icarus*, which, he thought, was a mistaken proceeding. There had been several instances in which the mere landing of the crew even, within the Tropics, as was the case with the *Highflyer's* crew at Barbadoes some years ago, had been followed by a cessation of the fever; and this alternative he considered preferable to that of running the ship to the northward, which in some cases, might be attended with inconvenience to the public service. He thought that too much care could not be taken to prevent accumulation of filth below, as, independently of the foul emanations from such matter, the formation of sulphuretted hydrogen was favoured by its admixture with bilge-water in the hold.

Dr. McWilliam observed that this most important and valuable paper appeared to open up but little field for discussion; for the facts detailed in it were so clearly and so unequivocally established, as to repel any attempt to question them. That the *Icarus* had arrived in Port Royal from Truxillo, with yellow fever contracted at Belize; and that the same disease had been communicated by the *Icarus* to the *Imaum* and to the *Hydra*, and from the *Imaum* to the *Barracouta*, could not well be disputed after what Dr. Bryson had related, except by those whose prejudices rendered them incapable of reasoning upon the subject. The out-and-out anticontagionists in respect to yellow fever, were as a class diminishing; at all events, they were now much less heard of than formerly, but they were far from being extinct; and he therefore, with Dr. Bryson, doubted whether the events connected with the *Icarus* at Port Royal, would in some quarters meet with a better fate than had befallen other equally convincing proofs recorded in the annals of yellow fever,—such as the introduction of that disease into the Island of Ascension by H.M.S. *Bann*, into Fernando Po by the *Ætna*, and into Boa Vista by H.M.S. *Eclair*,—all of which, notwithstanding their conclusiveness, had at times been either altogether ignored, or misrepresented by the suppression of truth, or the worse than erroneous assumption of those who, to account for an outbreak of yellow fever, invoke some incomprehensible hypothesis, such as a peculiar state of the atmosphere, limited (as they are bound to admit) to the locality where the disease prevailed, and to the exact period of its duration. In these days of free trade and unrestricted intercourse, Quarantine was a word of evil sound and import; but the Epidemiological Society had for its object the discussion, not of commercial, but of scientific questions, and he conceived it to be the duty of those in authority to lessen, if they could not always prevent, calamities similar to those which had been related to them that evening. With every consideration for the possible inconvenience to the Service, from ships in the West Indies or elsewhere, when invaded by the yellow fever, proceeding to a cooler latitude, he should, with Dr. Bryson, wish to see that course adopted in preference to any other; but, should circumstances arise so as to prevent this course being taken, nothing could interfere with precautionary measures being resorted to with respect to the infected ship or ships. It would most assuredly relieve Commanders-in-Chief, and other officers in command, as well as Medical officers, on distant stations, of much anxiety, doubt, and responsibility, if an order were issued (an order incapable of being evaded) from the authorities at home, to the effect that, apart from the conflict of opinion, with reference to the infectious or non-infectious nature of yellow fever, every ship at all seriously affected by that disorder should at once proceed to a colder climate, by which, as all experience has taught, the disease will, in a comparatively short space of time, be extinguished; and that, in the event of its being necessary to land the sick in a climate capable of maintaining yellow fever, measures of segregation of the sick from the healthy should be attended to, as well as of exposing the sick as much as possible to a free circulation of fresh air. He added that he should, at the next meeting, bring forward an account by Dr. Kinnear, Deputy Inspector-General of Port Royal Hospital, of the events connected with the sick of the *Icarus* and *Imaum* while in the Hospital, and which would be found to confirm the facts and views of Dr. Bryson. There was, to Dr. McWilliam, one gratifying feature in the sad history of the fever to which all had listened with so much attention, that the documents relating to it, so clearly and so honestly recorded, should have been so unreservedly made public through the medium of the Epidemiological Society. The time had been when the production of such reports, and the enunciation of such views as those to which these papers inevitably led, and

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at which Dr. Bryson and all present had arrived, might have entailed on a Medical officer persecution,—or, in other words, neglect,—the only kind of persecution which, even in those days, could in such a case be safely employed by those in authority.

Dr. Bryson, in reply to Dr. Milroy, said that the recent extension of yellow fever into countries previously free from it, supported on the large scale the view of its infectious quality. Contrary to the opinion of Dr. Milroy, he deprecated the plan of landing crews ill of yellow fever at Barbadoes, or anywhere else, where the disease could be maintained and spread; and urged the vessels running into a cold latitude as affording the only proper and fair chance of recovery to the sick. Segregation of the sick from the healthy was always advisable; but then it was difficult to carry this out on board ship. Dr. Bryson added, that too much stress had been laid on filth, overcrowding, and emanations from the hold, as causes originating and spreading yellow fever; and also upon what was called acclimatization, in bestowing a certain amount of defence against it. Sulphuretted hydrogen had often been spoken of as a cause of sickness. Now, although he was no friend to offensive smells, it was notorious, that, on board ship, articles of silver, gold lace, etc., were constantly blackened in officers' cabins by the evolution of this gas from the bilge-water, without any prejudice to the health of the ship's company.

Dr. Mackay, R.N., from his experience on the coast of Brazil, in H.M.S. *Cumberland*, concurred in the views taken by Dr. Bryson.

Dr. Babington thought that running out of the Tropics was always desirable in cases such as those described by Dr. Bryson. On the assumption that yellow fever was, as he believed, an infectious disease, much might be done by careful segregation of the sick from the healthy; but he thought efficient segregation scarcely possible on board ship.

After a few observations from Dr. Haward, on the general doctrine of contagion, and the influence of the rainy season in the production of tropical disease, the meeting adjourned at the usual hour.

THE PATHOLOGICAL SOCIETY.

Tuesday, February 19, 1861.

Dr. Copland, President, in the Chair.

Mr. Taylor, of Guildford, brought forward a specimen illustrating

A RARE FORM OF STRANGULATION.

It was taken from a woman, aged 36, who had had seven children, the youngest of whom was nine years of age. She had also had a miscarriage since the birth of her youngest child. On Wednesday, February 13, violent pain came on suddenly in the left side of the abdomen after stooping. During the night she had sickness, and towards morning all the usual symptoms of strangulation. No hernia could be detected. The lower bowel was relieved by enema, but no relief was obtained to the symptoms. She died on Saturday, the 16th. At the autopsy, the stomach and ileum were found to be very much distended, and on the right side of the abdomen the uterus was drawn up, and its right cornu attached to a mass of strangulated intestine. On removal, it was found that there was a hole in the right false ligament of the uterus, and through this three or four feet of the ileum had passed. Of this portion ten or twelve inches had also passed through a loop formed by the right broad ligament, which was adherent to the mesentery. Mr. Taylor believed that there had been inflammation of the broad ligament during pregnancy, and that it had then contracted adhesion to the mesentery, and that when the uterus subsequently descended into the pelvis, the band had been torn, and the intestine had slipped through. This, he believed, had probably taken place some time before, and that the passage through the second loop had taken place on the day on which the acute and fatal attack began.

Mr. Spencer Wells said the case brought to mind one in which fatal strangulation had occurred from a cause somewhat similar. In this case the stricture had been artificially produced by the pedicle after the performance of the operation of ovariotomy, the intestine passing between the pedicle and the parietes.

Dr. Part exhibited a specimen of

HYPERTROPHIED SPLEEN.

It was taken from a man aged 73. He had never had intermittent fever. Twelve months before death he complained of a tumour in the left side. It was then about the size of a fist. He gradually, but slowly, wasted, but did not suffer any definite symptoms until a few days before his death, when he became much worse, and had vomiting. On opening the abdomen the spleen appeared to occupy the greater part of the abdomen It weighed six pounds, and was twelve inches long and eight across.

Dr. Hare was appointed to report on the specimen.

Dr. Quain exhibited a specimen showing

RUPTURE OF THE LEFT VENTRICLE OF THE HEART.

The rupture, which was in the anterior wall, was an inch in length. The walls were soft, and covered by fat, and the tissues of the heart had undergone extensive fatty degeneration: in the pericardium was found twelve ounces of clot. It was taken from a gentleman aged 76. Eight years ago he had slight paralysis, and seventeen months later a slight attack of hemiplegia. For some time before death the only marked symptom was shortness of breath on going upstairs. He was first seen by Dr. Quain on January 31. The previous night he had had an attack of violent pain through the chest, in the region of the heart. He had a similar attack on several nights, and then regained his usual health. One morning, a week from the night of the first attack, after eating a hearty breakfast, he raised his hand to his head, and died suddenly.

Mr. Durham exhibited a specimen of

MISPLACED AND CONTRACTED KIDNEY.

Both kidneys were taken from a subject in the dissecting-room. The right kidney was oval and small, measuring two inches in length, and one and a-half inches in breadth. It was situated altogether above the level of the last rib, and was surrounded by dense fibrous tissue, which bound it firmly to the diaphragm. Similar tissue involved the upper part of the ureter, which was double to within an inch of the bladder. The artery entered the anterior and lower part of the organ. On section the structure appeared healthy, but all the Malpighian pyramids seemed blended into one. The left kidney occupied its normal position, and was about half as large again as usual. Mr. Durham remarked that the misplacement and small size of the right kidney must have resulted from the effects of inflammatory disease occurring in the surrounding tissues at a very early period of life. The case was practically interesting, inasmuch as had any examination been made during life, the lumbar region would have been found wanting in its ordinary fullness.

Mr. Durham also exhibited a

LARGE CANCEROUS TUMOUR.

It was removed by Mr. Hilton from over the left deltoid of a strong, well-made man, aged 44, free from constitutional taint. He had uniformly enjoyed perfect health until about two years ago, when a falling beam struck his left shoulder. Two days afterwards a black swelling appeared in the injured part; this gradually increased in size, and in February, 1860, Mr. Hilton removed what was believed to be a recurrent fibroid tumour. Six months afterwards the present tumour appeared, and began to grow rapidly. The tumour when cut presented somewhat the appearance of the more malignant forms of recurrent fibroid; but upon microscopical examination it was found to be made up of nucleated cells and nuclei, and to contain none of the fine filaments, etc., characteristic of recurrent fibroid. Mr. Durham considered, therefore, that it must be regarded as cancerous, although typical cancer-cells were not met with, and comparatively little juice exuded upon section. The case was interesting as showing—1st, that a malignant tumour may follow an injury received by a man in the prime of life, and as far as can be ascertained, free from all cancerous disease or inherited tendency thereto; and, 2nd, as showing that a tumour of a more malignant kind

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may follow the removal of a more innocent one. The greater malignancy of the second tumour in the present case was shown by the much greater rapidity with which it had grown, by the different appearance it presented, and by the different structure it was believed to possess.

Mr. Durham was requested, in conjunction with Dr. Wilks, to make a further examination of the tumour.

Dr. Bristowe exhibited a specimen of

TUBERCLE IN THE CEREBELLUM.

It was taken from the body of a girl aged 10. She was admitted into St. Thomas's Hospital in September last. A fortnight before she had become suddenly blind. Subsequent to admission she had epileptic fits. She was phthisical, and had diarrhœa. She died from phthisis. At the autopsy extensive disease of the lungs and bowels was found, and a tumour in the right lobe of the cerebellum. The optic tracts were quite healthy.

In reply to Dr. J. S. Wells, Dr. Bristowe stated that the eyes had been examined by the aid of the ophthalmoscope, and no disease of the fundus had been detected.

Mr. Partridge then exhibited specimens and drawings, illustrative of

FRACTURE OF THE PATELLA BY DIRECT VIOLENCE.

The first specimen was taken from a man who had fractured the femur. The injury to the patella was not discovered until some time later. It was a starred fracture, and partial union had taken place. The articular surface was broken in many directions. The ligamentous tissue in front was entire, but the fracture had been quite through the bone. Another specimen was taken from a man who had thrown himself out of a window. In this case the man sustained many other severe injuries, of which he died. There was no apparent injury to the skin over the patella, and after death there was found only a slight effusion of blood under the integument. The patella was, however, completely smashed on the condyle of the femur. Mr. Partridge said that he had been able to find but few specimens of fracture from direct violence in the Museums. There were none in St. Bartholomew's, St. Thomas's, or in the Hunterian Museum, but in Guy's several. In Guy's Museum there was a specimen of complete bony union after vertical fracture of the patella.

Mr. Brooke said that he had in several cases of transverse fracture succeeded in procuring bony union. He had, after keeping the patient in bed two months, with the limb elevated, directed him to continue to wear a splint behind the knee for some time after.

Mr. Curling said that no conclusion could be with certainty arrived at as to the nature of the union until after death.

Mr. Partridge said that the only certain means of testing whether the union was bony or ligamentous, after death, was to boil the bone, and that during life it was impossible to be certain. In two specimens in Guy's Museum the upper and lower fragments were close together and the parts were dry, but he suspected that if the bones were boiled it would be found that the union was ligamentous. He (Mr. Partridge) usually kept patients who had transverse fracture of the patella in bed five or six months, and then put up the limb in a starch bandage.

HARVEIAN SOCIETY OF LONDON.

Thursday, February 7, 1861.

Dr. Sieveking, President, in the Chair.

Mr. Weeden Cooke exhibited

THE BONES OF THE KNEE-JOINT OF A YOUNG WOMAN,

upon whom he had recently performed amputation of the thigh. Both the semilunar cartilages were gone, as well as the crucial ligaments. The ends of the bones had also lost nearly the whole of the periosteum. It was a case of rheumatic arthritis in a scrofulous subject. Mr. Cooke had been anxious to perform excision of the joint, but owing to the rapid progress of the case, and the supervention of pyæmic symptoms, he did not think this operation gave the patient the best chance of restoration. In performing the operation he adopted a modification of Teale's plan from which he had seen some excellent results in the Royal Infirmary at Edinburgh, under the care of Mr. Spence. He made a long anterior flap sufficient to turn over and cover the bone, and no posterior flap,—the integuments and muscles posteriorly being divided flush with the section of the bone. The long anterior flap was brought over the bone and united by means of silver sutures with the integuments posteriorly, thus forming a nice cushion for the bone. The great advantage of this mode of operating is that the purulent discharge cannot collect, and runs out as the stump lies on the pillow. Although the heart and lungs in this case were considered by Dr. Cockle, the Physician to the Hospital, to be in an unhealthy state, chloroform was, nevertheless, administered at the request of the patient, and no ill effects were produced.

Dr. Pollock then read a paper entitled

"WHAT WE KNOW OF PHTHISIS REGARDING ITS CURE."

Dr. Pollock first spoke of the various stages of phthisis, which disease he did not regard as necessarily making a steady progress to decay, but frequently exhibiting a succession of attacks, and susceptible of local repair; such cases he had seen—the system sometimes opposing itself to morbid action in so marked a manner as to cause very considerable prolongation of life. In referring to the cure of phthisis, Dr. Pollock said he had no specific to offer, and thought that no cure, in the popular sense, would be discovered. He was of opinion, that the average duration of life since the use of cod-liver oil, as stated by some authorities at four years, was too low an estimate. Tubercle might be absorbed, leaving the lung sound, by excavation and cicatrisation, or a cavity sometimes remains circumscribed, the patient living for years. Waste of tissue might be retarded by stimulants, when first going under treatment, and those taken at long intervals of time, were exhibited to the Society, which last gave evidence of favourable results.

Dr. Camps, Dr. Fuller, Dr. Wadham, the President, and other members, took part in the discussion, after which the Society adjourned to Thursday, February 21, when Mr. Hornidge will read a paper "On the Action of Ozone on Organic Compounds."

WESTERN MEDICAL AND SURGICAL SOCIETY.

Friday, February 15, 1861.

Mr. A. Leggatt, Vice-President, in the Chair.

Dr. Anstie read a paper on a case of

GASTRO-ENTERITIS COMPLICATED WITH ACUTE NEPHRITIS AND SIMULATING IRRITANT POISONING.

The author referred to the great rarity of gastro-enteritis as an independent disease, and the grave suspicions which are always felt when it appears to arise in this way, that in reality it is due to the presence of some irritant substance in the food, or drink, or medicine, accidentally or otherwise. In the present case, the patient was a weakly, anæmic girl, fifteen years old, in whom the menses had never yet appeared, and who was beginning to present the aspect of chlorosis. For some time, indeed ever since the formation of some abscesses in the glands of her neck, three years before, she had began ailing slightly,—complaining of vague and indefinite pains in the back and also in the epigastrium, which from time to time were relieved by the administration of simple medicines. She gave various indications of a "hysterical" temperament, moped about, and took but little interest in anything. About a twelve month ago she had a mild attack of scarlatina, but no dropsy or other sign of kidney-disease followed it. The symptoms of gastro-enteritis first manifested themselves about a month before her death, and consisted then in considerable and increasing pain in the epigastrium and back, and occasional vomiting, not especially connected

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with the taking of food. She became an out-patient of the Chelsea Dispensary, under the care of Mr. Blundell, the House-Surgeon, on January 17, 1861, and remained so till her death, eight days later, and she was also seen by Dr. Anstie. Up till within two days of the fatal termination, there were no alarming symptoms; the vomiting happened more often, and there was more pain and tenderness in the epigastrium, but still nothing pointed to immediate danger, when, on the 23rd, the existing symptoms became suddenly very much aggravated; purging, which had been present slightly on one or two previous occasions, recurred with violence, and blood and albumen made their appearance in large quantities in the urine. Treatment, which consisted chiefly of effervescing salines with hydrocyanic acid, and opium, the administration of ice, and of milk and lime-water by way of food, together with the application of two blisters successively to the epigastrium, had only the most temporary effect, and on the morning of the 25th, the patient died, apparently of syncope after a violent fit of vomiting and purging. (Of course no blister was applied after the kidney symptoms appeared.) There were never any convulsions, coma, or delirium.

An inquest was held; and the post-mortem was made by Mr. Power, Dr. Anstie, and Mr. Blundell. There were found evidences of acute inflammation throughout the stomach, small and large intestines; they were most marked in the duodenum. The mucous membrane in the stomach and small intestines was covered with thick bloody-coloured mucus, and was much congested; there was, however, no ulceration anywhere. The contents of the large bowel were more like ordinary fluid fæces, but the same congestion was present there also. The kidneys were large, heavy, and enormously congested, of a deep port-wine colour on section. There was not the slightest evidence of chronic disease about them. The uterus was in a virgin condition, and from the appearance of the ovaries, etc., it was certain that menstruation had never taken place. The remaining viscera were carefully examined, but presented no unhealthy appearance. The stomach and contents, the intestines and their contents, portions of the liver, the spleen and the kidney were placed in separate sealed and labelled jars, and removed to the Laboratory of Westminister Hospital by Dr. Anstie.

Dr. Marcet and Dr. Anstie made a careful analysis for arsenic, antimony, copper, lead, and mercury, and also carefully inspected the intestine contents with the naked eye, and, partially, with the microscope. The results were merely negative. Suffice it to say that the idea of irritant poisoning was completely negatived.

The author proved clearly that this was not a case of chronic Bright's disease, ending in uræmic poisoning, and finally dwelt strongly on the rarity of cases like the present, and their importance when they do occur. In the present instance there were no other circumstances of a suspicious character; but had such existed to justify the impression produced on the mind by the remarkable train of symptoms which occurred, an almost insuperable conviction of the criminality of some person or persons who had had access to the deceased would necessarily have arisen. The phenomena were precisely those which might have presented themselves had a metallic irritant been administered, in small doses, over a considerable period of time, and at last given in one or two large doses, producing the alarming symptoms which occurred two days before death; and among which it would not be surprising, on this supposition, to find acute irritation of the kidney appearing for the first time. The fact, therefore, that this remarkable sequence of disorders has been proved in this case to have depended on merely natural causes is an important one for the Physician, and especially for the Medico-legist. It may be well to mention that though the analysis made was only for arsenic, antimony, lead, copper, bismuth, and mercury, other considerations proved the impossibility, in this case, of poisoning by zinc, oxalic acid, cantharides, or savin. This completes the list of irritants which required any consideration.

Mr. Pollock narrated two or three

CASES OF FEMORAL HERNIA,

in which he considered death had been occasioned by the endeavours used in applying the taxis. He strongly advocated operating as soon as sickness occurred.

Mr. Rouse narrated a

CASE OF UNDESCENDED TESTICLE,

which had been mistaken for hernia, and in which the endeavours to reduce it, and the application of a truss, had occasioned death.

OBITUARY.

SIR WILLIAM BURNETT, K.C.B., K.C.H., M.D., F.R.S.

Sir William Burnett, late Chief of the Naval Medical Department, was born at Montrose, in 1779, and received his education at the Grammar-school there. He served his apprenticeship to Dr. Hunter, of Montrose, and then studied in Edinburgh. He was soon after appointed Surgeon's mate to the *Edgar*, of seventy-four guns, then with the North Sea squadron in Leith Roads. He served in the *Goliath* as Assistant-Surgeon under Sir J. Jervis, and was present at the action off St. Vincent and at the siege of Cadiz. He continued in the navy, and was present at the battle of the Nile and Trafalgar, for which service he was created a K.C.B., and had four war medals presented to him.

For five years Mr. Burnett had the charge of the Hospitals for prisoners of war at Portsmouth and Forton. Independently of other operations, he amputated the arm at the shoulder-joint five times—four times with perfect success.

In 1810 Mr. Yorke, then First Lord of the Admiralty, appointed him Physician and Inspector of Hospitals to the Mediterranean Fleet, which then numbered more than 120 sail.

In 1813 Dr. Burnett returned to England on account of impaired health. In 1814, his health having improved, he took charge of the Russian fleet in the Medway, then in a sickly state. He also undertook the superintendence of the department of prisoners of war at Chatham, among whom a contagious typhus was at the time raging.

He found the Danes and the Americans in a very deplorable state. The Hospital-ship was full of bad cases. One Surgeon had died, and there were two more dangerously ill. Small-pox prevailed extensively in one of the ships; so great, indeed, was the alarm which existed, that the Commander-in-Chief thought it necessary to place the whole in quarantine. Some idea of the disease may be formed from the fact, that at the time of his taking charge he found fifteen patients in the Hospital-ship with their lower extremities in a state of gangrene.

So hazardous was his duty considered by the executive officers of the ship, that the strongest representations were made by them to prevent his going below, alleging that he would either meet with personal violence or suffer an attack of fever. He, however, persevered in making his visits below without anyone accompanying him, and by degrees restored order, although the Medical duties became more arduous, as the Surgeons of both the Hospital-ships were attacked with the prevailing fever. He had the satisfaction, however, to find that his exertions were attended with the happiest results, for out of 193 patients taken ill before his arrival at Chatham 54 died, while out of 518 taken ill after he took charge only 61 died.

In 1822 he received an offer from Lord Melville of a seat at the Victualling Board, as the colleague of Dr. Weir, who was then in charge of the Medical Department of the Navy.

Here he was struck by the insufficiency of the returns then in use to show the nature and extent of sickness and disease existing in the Naval Medical establishments. He therefore required from the Medical officers periodical returns to show the diseases in each Hospital or ship on every station, and also the number of deaths from each disease. These regulations have been of great advantage, and most elaborate statistical reports have been published by Dr. Wilson and Dr. Bryson.

His personal visitations of the Naval Hospitals produced great benefit in the adoption of regulations suggested by him for their better and more perfect economy and management. Nor is it one of the least acts for which credit is due to him, that a merciful management of the naval lunatics at Haslar was established. This change was effected under the personal care of Dr. Anderson, who was selected by Sir William for

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that office on account of his practical knowledge and natural kindness of heart.

In the year 1841 a committee of Naval Medical officers met for the purpose of offering him a testimonial of the sense they had of the benefits he had rendered, not only to their own department, but to the service generally. The result was, that in a very short time Sir William was presented with his portrait in full length, painted by Sir Martin Shee, then President of the Royal Academy, accompanied by a handsome service of plate, and every subscriber had a copy of the well-known engraving made from the picture. Upon all suitable occasions Sir William evinced his anxiety and zeal for the prosperity of the Medical Department of the Navy. No small portion of the success which has attended the prolonged struggle of the Naval Assistant-Surgeons for their proper position was owing to the continued support of their claims by Sir William Burnett.

Sir William, soon after coming to London, became a Licentiate of the Royal College of Physicians, and some years afterwards a Fellow of the College. He was also a Fellow of the Royal Society, the Royal Colleges of Surgeons of Edinburgh and Dublin, and of the Medico-Chirurgical Society of St. Petersburg. He was the author of several papers, in the Medical journals; of a work on the Mediterranean Fever; the Official Report of Fever in the *Bann* Sloop-of-War on the African Station; and an account of a Contagious Fever prevailing among the Prisoners of War at Chatham.

Sir William Burnett died on the 16th ult., at the advanced age of eighty-two. He was a tall, strong, and very handsome man, greatly beloved by his friends, and the only fact in his history to which we can refer with regret, is the use he allowed a commercial company to make of his name in connexion with the sale of a solution of chloride of zinc. He was so firmly convinced, however, of the great use of this preparation as a deodorizer and antiseptic, that he adopted what he believed to be the best means for making its use general. This was his excuse, and this is not the place to discuss its validity.

MEDICAL NEWS.

APOTHECARIES' HALL. — Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, February 21 :—

Barnes, Frederic
Earle, James Lumley, Nether Stowey, Somersetshire
Pechey, Willlam Crisp,
Richards, Caleb Carey, Caerphilly, South Wales
Soper, William, Surrey.

DEATHS.

AINGER.—February 10, at Oxford-terrace, Hyde-park, Major Ainger, F.R.C.S., Surgeon H. M's Indian Army.

ARAN.—Dr. F. Aran, one of the most distinguished of the rising members of the Medical Profession in Paris, has just been cut off at the age of 44, as he was about to realize the fruits of his laborious life. He was Physician to the Hôpital St. Antoine, and the author of well known works on diseases of the heart, and diseases of the uterus, and of various valuable practical memoirs.

BAINES.—February 3, at Richmond House, Torquay, James Johnson Baines, formerly of Stanwix, aged 63.

EDWARDS. — February 14, at Aberystwith, David Edwards, aged 85. In practice prior to 1815. The deceased was a Town Councillor for upwards of 30 years, and, for nearly the same period an active magistrate of the Borough, and had filled the civic chair two successive years.

GILMAN.—February 22, at Laurel Mount, near Dunmanway, Thomas Henry Gilman, M.D., aged 43.

HARRIS.—December 31, at Rattan Bay Island, West Indies, of yellow fever, George Harman Harris, formerly of Reading, and afterwards of Eastbourne, M.R.C.S., Assistant Surgeon 2nd West India Regiment.

HOCKING.—November 12, of dysentery, at the mouth of the Peiho River, China, Thomas Edward Gidding Hocking, M.R.C.S.

LEACK.—February 21, Richard Leack, late of Blackburn, Lancashire, M.D. Univ. and King's Coll. Aberd. (exam.); L.R.C.P. Edin.; Fell. and M.R.C.S. Eng.; L.M. Dublin; L.S.A.

MILTHORPE.—February 16, John Milthorpe, of Topcliffe, Thirsk, Yorkshire, L.S.A.

MUNRO.—February 23, at Bellgam, near Cambeltown, Argyleshire, William Munro, Inspector General of Hospitals, aged 74.

OWEN.—November 13, David Dale Owen, M.D., so well known both in the United States and this country for his Geological Works He was the son of the celebrated Robert Dale Owen, and inherited the remnant of the property in the United States, which constituted his father's celebrated experimental self-supporting colony, so unfortunately named "New Harmony." Dr. Owen was State Geologist of Indiana.

PAUL.—February 11, in London, John Paul, of Elgin, M.D. Univ. Edin.; F.R.C.S. Eng., aged 68.

WOOD NAPHTHA IN DIARRHŒA.—In a paper by Dr. G. P. Hachenberg, in the *Cincinnati Medical and Surgical News* for September, the following remark is made in regard to treating diarrhœa: "After using for the last ten years wood naphtha, I am almost tempted to consider it the *ne plus ultra* remedy in infantile diarrhœa. I would just as soon be without quinine in treating intermittent fever, as to be without this medicine in treating diarrhœa. I have had many of my Medical friends use it, and with the greatest satisfaction."

MOTTOES OF LONDON MEDICAL CORPORATIONS.—Apothecaries' Hall has "Opiferque per orbem dicor." The College of Surgeons has, "Quæ prosunt omnibus artes." Both mottoes are taken from Ovid's "Metamorphoses:" —

"Inventa medicina meum est; *opiferque per orbem*
Dicor; et herbarum subjecta potentia nobis.
Heu mihi, quod nullis amor est medicabilis herbis,
Nec prosunt domino, *quæ prosunt omnibus, artes!*"
Lib. i., 521—4.

The College of Physicians' motto is the Greek apothegm of Hippocrates: "Life is short, and art long." Dryden's translation of the lines in the "Metamorphoses" runs as follows :—

"Med'cine is mine; what herbs and simples grow
In fields and forests, all their pow'rs I know;
And am the great Physician called below.
Alas! that fields and forests can afford
No remedies to heal their love-sick lord!
To cure the pains of love no plant availa,
And his own physic the Physician fails."

LONDON WELLS.—A correspondent of the *Builder* says:—"I see it stated in the London journals that it is in contemplation to remove Holywell-street, Strand, with a view to the improvement of that district of London. I have to express a hope that care will be taken, in that event, to search for and preserve the ancient 'Holy Well' of that locality, which still supplies the 'old Roman bath' in Strand-lane with the purest water, although the source is still hidden and neglected. It would be found, I have been informed, in some one of the back yards of the present houses in Holywell-street. In these days of public drinking-fountains it would afford an inexhaustible supply of pure water; and an appropriate architectural structure erected over it would be an ornament to that frequented locality, and the associations connected with it would gratify liberal and classical taste. It is as old as the days of Julius Cæsar, who, it is said, built the old Roman bath above stated." The water ought to be analysed for nitrates and organic matter.

NEWSPAPERS AND MEDICAL CASES.—The New York Academy of Medicine has commenced a new presidential term by recording its disapprobation upon newspaper reports of its proceedings. At a late meeting, the following resolutions were passed with but one dissenting voice: Whereas, Section 3 of Article 1 of the Code of Ethics of the American Medical Association, adopted by this Academy, declares it to be "derogatory to the dignity of the Profession" to publish cases and operations in the daily prints, *or to suffer such publications to be made*, and that such proceedings "are the ordinary practice of empirics and highly reprehensible in a regular Physician." Therefore, Resolved, That the practice heretofore in vogue in this Academy of permitting reporters of secular papers to attend its meetings, take notes of its proceedings, and publish them, is in violation of the said code, and is hereby prohibited in future. Resolved, That it is equally in violation of the said code for Fellows of the Academy to publish, or cause to be published, any transactions thereof, in any other than strictly Medical journals. Resolved, That nothing in the aforesaid resolutions shall be so construed as to preclude the Academy, at its discretion, from publishing in the newspapers any of its discussions or of its acts relating to hygiene or to public health."

ORIGIN OF SPECIES.—The theory of development, in the animal creation, although coming ever and anon before us under new guises, is one which has always had its supporters since comparative anatomy was made a subject of study. Among others, who had no dislike to look upon their great-grandmothers as apes, was Lord Monboddo; he, as is well known, laboured under the strong conviction that

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the human being was perfected by the hands of the monthly nurse, who, clipping the creature's tail, transformed in a moment the monkey into the man. It appears, however, from the lately published Autobiography of Dr. Alexander Carlyle that this nobleman had developed his theory further than is generally supposed, and among other conclusions is the following amusing one concerning the acquisition of speech by the sexes. Dr. Carlyle says—"Lord Monboddo, one of the most learned judges, is just about publishing a book in which he demonstrates that mankind walked originally on all fours, like other animals, and had tails like most of them. That it was most likely 5000 years before they learned to walk in an erect posture, and 500 more before they could learn the use of speech. The females, he thinks, might speak two or three centuries sooner."

PHTHISIS IN SCOTTISH TOWNS.—The following table shows the per-centage of consumption in the eight principal towns of Scotland, to the estimated population and to the deaths in 1860:—

Towns.	Per cent. to Population.	Per cent. to Deaths.
Glasgow	0·43	13·9
Edinburgh	0·29	12·9
Dundee	0·35	11·8
Aberdeen	0·34	12·7
Paisley	0·39	14·4
Greenock	0·48	15·5
Leith	0·22	8·4
Perth	0·32	12·8

It is not to be supposed, from the above statement, that Leith enjoys an immunity from consumption superior to Edinburgh; the very small proportion in Leith arises from the Infirmary at Edinburgh drawing a certain proportion of the cases from Leith, and as they die in Edinburgh, they are reckoned as deaths in Edinburgh. There is perhaps no disease, or class of diseases, which more clearly shows the unhealthiness of a town or locality than consumption, and it is a striking fact that if the towns were arranged in their order of least mortality from consumption, as compared with the population, they would stand in much the same order as if arranged according to that of fewest deaths to the whole population. It may surprise many that Edinburgh should stand so high in the list—as that in which the proportion of deaths from consumption is so much smaller than in the other towns—but its exposed site on sloping hills, and the consequent thorough ventilation of even its most densely-peopled low streets and closes, sufficiently accounts for the fact; and were its drainage (surface as well as underground) and its sanitary arrangements in the lowest class of dwellings somewhat improved, and over-crowding prevented, it cannot be doubted that it would prove one of the very healthiest towns in the kingdom.

THERAPEUTICAL ACTION OF SOLANUM DULCAMARA AND SOLANINE.—Professor Caylus, of Leipzig, has undertaken a series of experiments to ascertain the exact effects of dulcamara, and its active principle, solanine. These substances produce a paralysing action on the medulla oblongata, and an exciting action on the nerves. They cause death by producing paralysis of the respiratory muscular apparatus, by an action analogous to that of coneine and nicotine. They possess a therapeutical action in spasms and irritable conditions of the respiratory organs in simple spasmodic cough, whooping cough and spasmodic asthma. Their therapeutical action in certain morbid conditions of the blood—as gout, rheumatism, constitutional syphilis, and perhaps in certain chronic diseases of the skin—may be due to their augmenting the excretion by the kidneys, of the constituent parts of the blood which have undergone combustion, and not to the excitement of cutaneous activity. Solanine and dulcamara may be given without danger in inflammatory conditions of the stomach and the intestinal tube, as they exercise no action on those organs. Inflammation of the respiratory organs presents no contra-indiction to the employment of solanine and dulcamara, but they are contra-indicated in inflammation of the kidneys. The medium dose of solanine for an adult is from one to five centigrammes of acetate of solanine, a substance which M. Caylus prefers to the pure alkaloid, in consequence of its solubility. The most suitable form of administration is in pills, the solution of the salts of solanine having a very disagreeable taste. The extract obtained from alcohol, and then washed with water to remove the alcohol, is preferable to the watery extract generally employed.

RELATION OF FORCES.—"We now look on space as full. We know that light is propagated like sound, through pressure and motion. We know that there is no substance of caloric—that inscrutably minute motions cause the expansion which the thermometer marks, and stimulate our sensation of heat—that fire is not laid up in coal more than in this Leyden phial, or this weight: there is potential fire in each. If electric force depends on a residual surface action, a resultant of an inner tension experienced by the insulating medium, we can conceive that electricity itself is to be understood as not an accident, but an essence of matter. Whatever electricity is, it seems quite certain that electricity in motion is heat; and that a certain alignment of axes of revolution in this motion is magnetism. Faraday's magneto-optic experiment makes this not a hypothesis but a demonstrated conclusion. Thus a rifle bullet keeps its point foremost; Foucault's gyroscope finds the earth's axis of palpable rotation; and the magnetic needle shows that more subtle rotatory movement in matter of the earth, which we call terrestrial magnetism, all by one and the same dynamical action."—*Professor W. Thomson.*

USES OF TEA.—At a recent meeting of the Society of Arts a paper was read on "The Uses of Tea in the Healthy System," by Dr. E. Smith. The author began by stating the opinions brought forward by Professor Johnstone and other chemists on this subject—views which were still very generally held. These might be summed up thus: that by the use of tea—1. The waste of the body is lessened; 2. The body is nourished; 3. By lessening waste, we may lessen supply, and yet the bodily powers shall be duly sustained. He stated his reasons for differing from these statements, and explained the nature of the experiments which he had undertaken in order to ascertain the actual effect produced by tea. If there be an abundance of food in the system, and that especially of the farinaceous or fat kinds, tea is a powerful digestive agent, and, by promoting the transformation of food, it aids in nourishing the body; but with a deficiency of food in relation to the waste of the tissues by exertion, or the waste of heat by cold or by too profuse evaporation from the skin, it wastes the tissues of the body, and lowers the vital powers. He therefore considered that it was not suitable as a partial substitute for food, as was generally supposed: for it increased the waste of the body. It was not suitable for persons of spare habits, or while using exertion; nor was it adapted for men in low temperatures, or where the action of the skin was defective.

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·461 in.
Mean temperature	45·9
Highest point of thermometer	56
Lowest point of thermometer	36·7
Mean dew-point temperature	43·7
General direction of wind	S.W.
Whole amount of rain in the week	0·55 in.

VITAL STATISTICS OF LONDON.

Week ending Saturday, February 23, 1861.

BIRTHS.

Births of Boys, 1035; Girls, 856; Total, 1891.
Average of 10 corresponding weeks, 1851-60, 1780·5.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	661	657	1318
Average of the ten years 1851-60	641·5	644·1	1285·6
Average corrected to increased population..	..	..	1414
Deaths of people above 90	1	1	2
Deaths in 15 General Hospitals	33	21	54

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DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1851.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	376,427	1	4	8	4	13	5	4
North ..	490,396	1	4	7	3	13	6	4
Central ..	393,256	..	9	4	1	8	3	1
East	485,522	4	1	5	1	22	7	6
South ..	616,635	1	2	12	2	22	13	5
Total.. ..	2,362,236	7	20	36	11	78	34	20

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P. H.—Surgeon with Captain, Assistant-Surgeon with Lieutenant.

Dr. D. will find all particulars as to pay, etc., in the Naval Medical Service in our last Students' Number.

Anti-Charlton should send his name and address, and a reply should be sent to him.

A New Subscriber.—No such arrangement has been made between the London and Edinburgh Colleges. It was proposed, but the Charter has not been obtained.

Amicus Vitæ.—If the interference of the priest really tended to prevent the patient's recovery, an inquest should be held. There may be injudicious ministers of religion of all denominations, and it is not fair to condemn a whole body for the error of one member.

Titles.

To the Editor of the Medical Times and Gazette.

Sir,—In a recent leading article headed "Only a Doctor," you remarked, that "pretentious titles will be repudiated, and plain *Mr.* be considered the most honourable designation." In this sensible opinion many distinguished Physicians cordially concur; and I believe would readily adopt your suggestion, were some metropolitan magnates of influence to set the example. Really something should be done,—since the term "Doctor" has now become so common, and is even assumed without sufficient authority, that it confers no distinction, nor is held by the public in any estimation like what it was in former days, while the appellation appears, at present, esteemed of little value as a professional qualification. I am, &c.
February 28. Medicus.

The New Licentiates of the Royal College of Physicians.

To the Editor of the Medical Times and Gazette.

Sir,—In answer to the questions of "A Disappointed L.S.A." in your last issue, let me refer him, in answer to his first question, to the Bye-laws of the College, one of which is as follows:—"No Licentiate of the College shall use any name, title, designation or distinction implying that he is a Member or Fellow of the College, or of any other College of Physicians, unless he be a Member or Fellow, etc. . . . . Nor shall any Licentiate, by virtue of the licence granted to him by this College, assume the title of Physician."

In reply to his second question, he may rest assured that the third-class Licentiate of the Royal College of Physicians of England, will in status, *i.e.* professional education, be superior to the Licentiates of either Dublin or Edinburgh, although the latter assume the title of "Doctor."

To the third question it may be replied that as the new Licentiate is not and cannot assume the title of Physician, it stands to reason that he cannot compete for a Physician's appointment. He is in fact still a General Practitioner and dispenser of medicines, and, as such, has no claim morally, or in public opinion, to the title of a Physician, who is recognised as the prescriber only. I am, &c.
A Fellow of the College.

Black Eye.

To the Editor of the Medical Times and Gazette.

Sir,—A correspondent asks the communication of an effective remedy for ecchymosis of the eye in a lady patient who had met with an accident. One which I have used for a great many years, never disappointing me, usually getting rid of the blackness in a few hours, is the root of the "Convallaria," "Solomon's Seal." It should be washed, the dark coloured cuticle carefully cut off, then scraped like horseradish, applied direct to the eye in the way of a poultice, cold. A tingling sensation is the consequence, when this sensation ceases, another fresh application should be made, and repeated until the whole ecchymosis is absorbed. I have often found it sufficient to apply the scraped root at bedtime to the closed eye, when the blackness has disappeared by the morning. The Convallaria is readily found, and is equally effectual at this season of the year. I am, &c.
Aberystwith, February 18. M. D.

COMMUNICATIONS have been received from:—

M. Claude Bernard; Dr. Symonds, Clifton; Dr. Bryson; Dr. McWilliam; Dr. Lyons; Mr. W. Martin; Mr. Wylde, Dublin; Mr. Solomon; Registrar-General; Mr. H. Smith; Mr. Griffin; Mr. T. Smith; Mr. Rogers; Mr. Frederick Needham, York; Mr. Bryant; Mr. Swallow; Mr. Workman; Mr. Fortescue; Mr. Vincent; Mr. Wadlove; Dr. Kidd; Mr. Saville; Mr. Cross; Mr. Williams; and Mr. Irvine.

APPOINTMENTS FOR THE WEEK.

March 2. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

Royal Institution, 3 p.m. Dr. E. Frankland "On Inorganic Chemistry."

4. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

Medical Society of London, Council, General Meeting, 7 p.m.; Dr. Kidd "On Chloroform," 8½ p.m.

Epidemiological Society, 8 p.m. Dr. B. W. Richardson's paper, "Further Inquiries on Scarlet Fever."

5. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

Royal Institution, 3 p.m. Professor Owen "On Fishes."

Royal College of Surgeons of England. Professor Savory "On the Physiology of Food."

6. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

Royal College of Physicians, 4 p.m. Dr. Guy "On Tabular Analysis Applied to the Discovery of Truth in Medicine and the Allied Sciences."

Obstetrical Society of London, 8 p.m. Dr. Madge "On a Case of Uterine Hæmatocele." Mr. Baker Brown "On the Treatment of Fibrous Tumours of the Uterus." Dr. Tanner "On a New Form of Vaginal Pessary."

7. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.

Royal Institution, 3 p.m. Professor Tyndall "On Electricity."

Medical Society of King's College, 8 p.m. Clinical Meeting.

8. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

Royal College of Physicians, 4 p.m. Dr. Barker "On Diseases of the Serous Membranes."

Royal Institution, 8 p.m. Dr. E. Frankland "On Some Phenomena attending Combustion in Rarefied Air."

Medical Society of London, 5 p.m. Anniversary. Oration.

EXPECTED OPERATIONS.

King's College Hospital.—The following Operations will be performed this day (Saturday) at 2 o'clock:—

By Mr. Fergusson—Injury to Nose; Removal of Polypus from Nose; Division of Popliteal Nerve; Resection of Knee.

By Mr. Bowman—Resection of Knee.

Metropolitan Free Hospital.—The following Operations will be performed on Monday next, at 2 o'clock:—

By Mr. Borlase Childs—Removal of Breast; Fistula in Ano.

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ORIGINAL LECTURES.

LECTURES
ON
THE SPINAL CORD,
DELIVERED AT
The College of France,
DURING THE SUMMER SESSION 1860,

By M. CLAUDE BERNARD,
Member of the French Institute; Professor of General Physiology at the Faculty of Sciences, &c.

Lecture IX.

ON THE DIFFERENCE OF THE PROPERTIES OF SENSITIVE AND MOTOR NERVES, WHEN DIVIDED.

Summary: The Action of Medicaments and Poisons on the Nervous System appears to increase its Powers at first—Application of these Views to Pathology—Effects of Opium—The morbid Alterations of the Nervous System modify the Results of external Stimuli—In the healthy State Galvanism exerts more Power over the Motor than the Sensitive Nerves: when the Spinal Cord has been divided the reverse takes place—General Effects of Injuries brought to bear upon the Sensorial Apparatus—The Origin of Tetanus traced to this Source—Artificial Production of Epileptic Fits—M. Brown-Séquard's Researches and Experiments on this Point—The Effects of Strychnia and Woorara contrasted—The Experiments relative to this Subject performed before the Class—Morbid Changes exclusively produced by the Nervous System—Convulsions, Congestions, perverted Secretions, etc.—Reaction produced by Cold Water Treatment—Essential Difference between the two chief constituent Parts of the Nervous System.

Gentlemen,—The action of medicaments and poisons upon divided nerves was the principal subject of our last lecture; and we succeeded in placing before you the experimental proof of our former assertion, viz. That a temporary excitement of the nervous system is the direct result of their introduction into the economy. Woorara itself, which tends to paralyse all motor nerves, produces at first a transitory exaltation of their properties, so that if it were possible to suspend the destructive process, and permanently to maintain the nerve in the same state as at the beginning of the experiment, its results would be diametrically opposed to those which are ultimately observed. This singular property appears to belong to most of the substances which act upon the nervous element. Opium, for instance, when copiously indulged in, produces at first a temporary state of excitement, and afterwards stupefies the patient. Its effects, when prescribed in small doses are also known to differ considerably from those which follow its ingestion in large quantities; and the same is the case with numerous other substances—a fact which the preceding reflections may tend in some degree to explain.

But these phenomena, as we have just witnessed, equally depend upon the state in which the nervous system happens to be at the moment when the foreign agent is introduced into the body; and the same rule applies to external stimuli: galvanism, among other excitations of this kind, acts more powerfully on the motor than the sensitive nerves, in sound animals; that is to say, when a compound nerve is placed under the influence of a galvanic current, the intensity of which gradually increases, ordinary muscular contraction is produced long before the animal's plaintive cries, or reflex movements, afford a proof that the sensitive fibres have been acted upon. But when the spinal cord has been divided, the reverse takes place, and the hyperæsthesia which results from this mutilation causes the sensitive fibres to be affected before the motor elements: reflex movements, and a vivid sensation of pain, are produced before direct contractions have been elicited by the application of galvanism to a mixed nerve.

The mechanism through which local affections pervade the whole system and become general diseases, has often been adverted to in this course: we have shown you that the vessels and nerves are alone concerned in the transmission of of local effects; and that in the nervous system, this power exclusively belongs to the sensitive apparatus. The action of poisons, the effects produced by injecting sand into the capillaries, etc., have already been adduced as proofs; a further instance of this is derived from Veterinary Surgery. When a horse has injured itself by stepping on a sharp stone, or a pointed fragment of metal, the general phenomena (fever and inflammation) with which similar accidents are usually attended will not take place if the sensitive nerve leading to the wound is divided; and none but local symptoms will in this case be observed. If, on the contrary, instead of cutting the nerve, a local hyperæsthesia is created, by dividing the spinal cord on that side, the opposite effects will be produced; the pain, fever, and inflammation resulting from the wound will acquire at once additional intensity.

We find the same to be the case, in a disease which has at all times deeply engaged the attention of the Medical world, although its real nature still remains involved in doubt; we allude to tetanus,—a spasmodic affection evidently connected with peculiar alterations in the nervous system, which have hitherto escaped our inquiries. This disorder is produced with the greatest facility in animals in which the spinal cord has been mutilated, as before; so that, on joining this fact with the above-mentioned ones, we find that both fever, tetanus, and epileptic convulsions may be developed by creating hyperæsthesia on a given point by artificial means, and stimulating the corresponding region of the body. The epileptic fits observed by M. Brown-Séquard, in guinea-pigs, the spinal cord of which had been divided on one side, must, evidently, be referred to this latter class of phenomena. M. Brown-Séquard even states that spontaneous attacks of this disease, making their appearance at stated intervals, may in this manner be generated in these animals.

The facts hitherto enumerated tally with the general rule, that the properties of any given portion of the nervous system acquire an extraordinary intensity when separated from the brain; but the essential difference, which distinguishes sensitive from motor nerves, is the power of creating general effects through local causes, which has already been mentioned. In one of our preceding Lectures (a) we described an experiment which affords an elegant and forcible demonstration of this property. After amputating one of the posterior extremities in a frog, so as to leave it adhering by a single nervous trunk to the body, strychnia is injected into the vessels of the insulated limb, and general convulsions are at once produced, through the nerve which remains intact; but when woorara has been employed, its effects are entirely local. In animals, in which the posterior columns have been divided on the same side, the effects are, of course, more strongly marked; but if the spinal cord has been completely cut through, the convulsions are wholly confined to the posterior extremities.

We have just performed the amputation in the manner described above on the frog, which we now place before you, and in which the spinal cord had previously been divided on one side. We are now going to inject a solution of strychnia into the vessels of the amputated leg, and general convulsions will shortly arise.

[The experiment is performed: and within two minutes after the injection convulsions are observed over all the body.]

You perceive, gentlemen, that without having recourse to the vascular system, the nerves alone are capable of transmitting local morbid impressions, the effects of which pervade the whole system at once; the nerves, in fact, exert this influence not merely on the muscular element, but on glands, vessels, and other tissues, and are thus enabled not merely to produce convulsions, but also to create congestions, and give rise to perverted secretions; all these morbid phenomena, when called forth by the action of the sensorial apparatus, obey the same laws as in the case of the motor fibres. Thus, when local disorders create fever through nervous influence, the morbid process goes through several successive stages before the ultimate result is attained: fever, in fact, appears to be a peculiar state of the economy, in which the vaso-motor nerves undergo a temporary paralysis; hence arises the unusual activity of the vascular functions in febrile disorders, but the chilly sensation and shivering fit, which usually precede the apparition of fever, are evidently the signs of a totally opposite condition of the vessels. It would seem that a sudden contraction takes place in the capillary vessels, previously to their passive enlargement. The connexion of phenomena in this case, is strictly parallel to that which occurs in the motor nerves, when under the influence of poisons,—nervous excitability increases during the first moment, then diminishes, and finally fades away.

(a) Lecture XXVII. "On Poisons."

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We meet with something similar in the reaction to the skin which usually succeeds a sudden immersion in cold water. The vessels contract at first, and the external temperature sinks for a few seconds; but within an instant the capillaries relax again, and are immediately gorged with blood. At this moment the temperature of the skin rises above its former level.

It may therefore be stated, gentlemen, as a general rule, that in sensitive as well as in motor nerves an augmentation of force can always be produced by certain definite Surgical operations; and that the essential difference between the sensitive and the motor apparatus consists in the power of transmitting local effects which belongs to the first and is denied to the second.

ORIGINAL COMMUNICATIONS.

A CASE OF IDIOPATHIC TETANUS.

By JOHN GRANTHAM, F.R.C.S. (Honorary).

On September 13, 1860, Albert B., of Bexley, was attacked with fixed rigidity of all the muscles of volition, excepting those belonging to the pharynx, larynx, and upper extremities. In appearance he was very thin, and looked not to have been in health, yet without complaining, so as not to excite any apprehension of impairment of health in the minds of his parents; in temperament I considered him to be of a nervous or excitable character; in mental endowment, good, and particularly truthful. His appetite was rather inordinate, inclining to indulge freely in animal food. I learned that his habit of body was tending to constipation, but very seldom had recourse to aperient medicine; the skin was unusually thin and fair, and as is too much the custom, not sufficiently protected from the effects of change of weather with woollen clothing. The countenance depicted all that anxiety and dread incidental to this formidable malady; the skin pouring out the perspiration without intermission; the pulse very feeble, and ranging between 100 and 120. On the seventh day the action of the heart became irregular, the diastolic murmur not being in consonance as to time with the systolic action; percussion of the chest denoted the absence of all disease of the lungs; the abdomen on percussing, except over the right ascending colon, gave no evidence of any engorgement in the intestines. The attempt to speak or move, or to be moved was most acutely painful; the spasmodic paroxysms increasing the picture of distress in the features, to what I would fain term "dreadful anxiety;" the extreme fixed rigidity of the trunk and legs with projecting tendons were truly appalling.

The treatment of this case from day to day was according to the power of the various organs and symptoms observed,—and here I protest against the principle of applying or giving any one drug as a specific; the treatment must be varied according to the development of the symptoms which can only be reasoned upon at the bedside of the patient; it is of the greatest importance in the management of the case that the mind of the Medical man be left to its fullest powers of observing and acting, doing that and that only which in his judgment is admissible under the investigation of cause and effect known only to him who is daily attending the patient. By this remark I do not deny the effects of conium, chloroform, opium, musk, or the woorara, etc.; but I advocate their proper use at the proper time, thus upholding a maxim of Boerhaave's, "That the efficacy of medicine depends on the precision of its administration." On my first visit I ordered him to be put into a hot bath at 105°, gave an aperient of calomel and jalap with colchicum in a saline mixture, the calomel acted freely, and the urine became increased in quantity, with occasional deposits of the lithates. I next had recourse to the administration of chloric ether, camphor, and opium, with the view of lessening the tension of the muscles, after which I had the trunk and legs rubbed with equal parts of liquoris ammoniæ fortior and oleum olivarum. I then kept up the action of the intestines with small doses of castor-oil given every six hours, and used croton-oil to the spine as a counter-irritant, which produced an extensive rash over the whole body; this treatment brought away an immense quantity of hardened fæces, which fell from him like stones. I regret not having had them analysed. It is right to observe that up to this the fourteenth day he could only pass motions either in the horizontal or perpendicular position, as the body could not be flexed on the legs; the latter, that is, in a standing position, the usual way of passing his evacuations. This copious action of the colon afforded some relief to rigidity of the pectoral and abdominal muscles, and equalised the heart's action. I again resumed the treatment of equal parts of oil and ammonia to the skin with unmistakeable good effect; this, with the persistence of the castor-oil as an aperient, and quinine as a tonic, and a bland diet of beef-tea, bread and rice puddings, milk, brandy, and port wine occasionally throughout the treatment, effected a complete return of muscular power about the thirtieth day.

Remarks.—I am inclined to the belief that very few of us have ever witnessed a true case of idiopathic tetanus, although having had forty-three years of active professional life in every department of Medicine and Surgery, and have seen many cases both of acute and chronic traumatic tetanus, the above is the only case of idiopathic tetanus I have been permitted to observe. I must confess that a true case of idiopathic tetanus does, indeed, very closely simulate the symptoms resulting from the poisoning of strychnine; the inability to bend the body on the limbs; the total inaction of the rectum; the pain of attempting any voluntary movement; the projection of the tendons like a dislocation of the joints so tense that pressure had no effect in making them yield, are so much like the appearance of the body under the tetanic influence of strychnine. In conclusion, I am inducted to receive the theory that tetanus is a blood disease.

Crayford.

CASE OF ABSCESS OF THE BRAIN.

By JOHN SKAIFE, M.R.C.S.

Having seen in the *Medical Times and Gazette* a series of cases of abscess of the brain, I am induced to forward a few particulars of a case which recently occurred in my own practice.

On the 17th of August last I was called to a patient, a young man, aged 18, who was suffering from severe pain in the head, which he described as continuous and throbbing, but varying in intensity, and situated chiefly in the frontal and temporal regions, and he had also, when he laid down, severe pain in the back of the head. He endeavoured to lull the pain by pressing his head firmly between his hands. He was evidently suffering very severely; his pupils were natural and active, and there was no symptom of any paralysis of the face or of any of the limbs; the skin was moist; the pulse 58, soft, and regular; there was great intolerance of light, and the least noise also was disagreeable to him. I found that on the left side he was nearly quite deaf, and there was a great deal of purulent discharge from the meatus. His appetite was quite gone; his temper was peevish; and he had not slept for two or three days and nights, and was occasionally delirious.

The history I obtained from his friends was, that, with the exception of the discharge from the ear, he has generally had good health, and had been strong and active. The disease of the ear was supposed to have been caused by a fall when seven years of age. He then hurt the left side of his head; he was insensible for several days. Leeches, etc., were applied, and he apparently recovered perfectly; but at the age of ten he began to have pain in the back of the head and in his forehead, and his temper also became more irritable; he would scream out at night, and fancy that some one was striking him on the head with a stick. The pain at length appeared to be limited to the region of the ear, and he was relieved by a discharge of "clear water" from the meatus. The pains never quite left him, and he became somewhat deaf, and a discharge of purulent matter continued. The pains would sometimes be very severe, almost unbearable. It was described as sometimes shooting down the nose.

For the six months previous to his death, his temper became excessively irritable, he would destroy things in a rage and then would shed tears of regret and become very despondent. He had no drowsiness, strabismus, o:

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paralysis, and his appetite and general physical power seemed, so far as his friends could tell, quite unimpaired.

One day, six weeks before his death, he had a plunge-bath,—it was supposed that he had struck his head against the bottom of the bath; soon after he became very pale, and complained of his head, particularly in the forehead and temples, where he felt great throbbing. From that time his health rapidly declined, the irritability of his temper increased, he became more desponding, and appeared to care for nothing except to lie in bed and be undisturbed.

It is needless to dwell further on the progress of the case; the symptoms of abscess of the brain have been so often described, and the present case presents no further distinctive feature. He became more delirious, and died four days after I saw him.

Autopsy.—No evidence of fracture or injury to the skull; membranes of the brain quite healthy, no adhesions; substance of cerebral hemispheres firm and healthy, rather more than the usual amount of fluid in the ventricles; fornix unnaturally soft; surface of cerebellum quite natural, but the substance of its left lobe was the seat of an abscess, about the size of a bantam's egg, the lobe around being softened and degenerated. The right lobe was healthy, and there was no trace of any disease extending from the left internal ear; there was no disease of the petrous bone seen; but I did not take out the bone, and I omitted to tear off the dura mater.

There is, I suppose, very little doubt but that disease in the left ear was the *fons et origo mali*.

42, Myddelton-street.

ON

PARASITIC AFFECTIONS OF THE SKIN.

By T. McCALL ANDERSON, M.D.

Fellow of the Faculty of Physicians and Surgeons of Glasgow, &c.

No. V.

In my last Paper I entered upon the consideration of the symptoms of the different varieties of favus, and concluded with a short sketch of the causes predisposing and exciting. I come now to the *Diagnosis*. This is, in the majority of instances, very simple. In cases where the head is more or less covered with an eruption exhaling the odour of mice, and consisting of bright yellow dry crusts depressed in the centre, through the middle of each of which one or more hairs pass, which have a dull, dry appearance, and are more easily extracted than natural, the diagnosis is perfectly simple; and those who have seen the disease once can never mistake it. When it has continued for a length of time, when the crusts have lost their cup-shaped form and their bright yellow colour, and have become entangled in the hairs; when, in fact, we have to do with the variety described as favus squarrosa, it may be—and often is—mistaken for impetigo of the scalp. But in the former there are generally *patches* of alopecia, which are wanting in the latter. In it certainly the hairs often fall out, although only *here and there*, and not in *patches* as in favus. The alopecia of favus is *permanent*, that of impetigo generally *temporary*. There is also no alteration of the hairs in the latter; in the former they are dull, dry, discoloured, and easily extracted. Attention to these points generally serves to clear up the diagnosis; but if doubt still exists, it may at once be removed by the microscopic examination of the crusts. There is one point, however, which requires to be borne in mind, namely, that the discovery of some pustules does not prove that the disease is impetigo, as pustules are frequently developed in cases of favus from the irritation of the parasite. And also one should not lay too great stress on the value, in a diagnostic point of view, of the odour exhaled from the eruption; as this symptom is not so pathognomonic as some dermatologists would lead us to suppose.

Psoriasis of the head might in some cases be mistaken for favus when this latter is not well marked. But in the former there is no alteration of the hairs, no alopecia, and no peculiar odour. The crusts, also, are much whiter, are more adherent than in favus, and the characteristic silvery scales of psoriasis are generally to be detected on other parts of the body, and especially on the elbows and knees, for psoriasis confined to the head is rare. In doubtful cases the microscope at once determines the nature of the affection.

Very often the diagnosis is rendered difficult on account of a propensity of parents to clean carefully, and remove all the crusts from the head before bringing their children for advice. There is then to be seen redness of the scalp combined with the presence of a few pustules, the results of irritation, and which makes the disease resemble impetigo. But if it is a case of favus which we have before us the *deep red, depressed*, distinctly *circumscribed* surface, covered by a *thin, shining* epidermis, is quite different from the light-coloured, diffused redness of impetigo. If this is not sufficient, the hairs should be examined, when they will be found to be altered, and the parasite is detected in them with the microscope. If this is not satisfactory, do not give an opinion, or resort to any treatment, but desire the patient to return in a couple of weeks, leaving the head untouched in the *interim*, after which time the disease will have had time to re-develope itself, and its nature is at once discovered. Favus, attacking the hair-follicles of the body, is easily detected, as the crusts invariably assume the cup-shaped form, and the epidermic variety of the disease, and favus of the nails, if not overlooked altogether, are easily diagnosed, provided always that we keep in mind the characters pertaining to each, as given above, and do not forget the fact that they occur, almost invariably, secondarily to the favus of the hair-follicles.

The *Prognosis* which in former times was very serious, owing to the supposed incurable nature of the disease, is now, on the contrary, very favourable; for it has been satisfactorily proved that, by the aid of the treatment about to be recommended, a cure, even of the very worst cases, can invariably be effected. If treated in its early stages, recoveries take place without leaving the slightest deformity, but when the treatment is commenced after the disease has lasted a length of time, the alopecia and the atrophy of the scalp, which it produces, can never be removed. Cases of death from pure favus have always been rare, and should never occur in the present day, and, indeed, it is only after it has lasted a very long time, that it affects the general health to any extent.

Treatment.—It can easily be imagined that a disease such as favus, which can be traced back to the remotest ages, and which, till of late, was deemed incurable, should have called forth very varied and opposite principles of treatment. Some considered it to be essentially a constitutional, in fact a scrofulous, affection, to be removed by constitutional treatment only; others were of opinion that it was purely a local disease to be removed by topical applications alone; while a third party looked upon it as a disease partly local and partly constitutional, and attacked it both by local and general remedies. The local treatment has, however, at all times and in all countries, played a more important *rôle* than the constitutional. When no treatment is adopted it is very rare indeed, that the disease disappears, unless after it has destroyed every one of the hair-follicles of the scalp and produced a permanent alopecia. But even then, it may continue to flourish on other parts of the body. When left to itself it generally lasts more or less extensively during the whole life of the person affected.

The effect of an acute intercurrent disease, a typhoid fever for example, on the favus affection is very curious. During its continuance the achorion does not flourish, but fades as plants do, when the soil in which they are planted is not supplied with moisture, or is otherwise inappropriate, and it only assumes its pristine vigour after the disappearance of the fever. Of the many varieties of local treatment adopted, that by means of the *Calotte* is the most celebrated, and is still practised in France to a considerable extent. This consists of a plaster which is prepared in the following way: "About four ounces of rye-flour are mixed with a pint and a-half of white vinegar in a pan, this is then put on the fire, and the mixture stirred continually; to it, when it boils, is added half an ounce of the carbonate of copper in powder. The whole is then boiled for an hour, after which about four ounces of black pitch, six of Burgundy pitch, and four of resin are added; when thoroughly mixed and melted, about six ounces of antimonial ethiops are put in, and the mixture is stirred continually, till it has assumed a suitable consistence. This plaster is then spread upon strong cloth" (a). It is

(a) "Traité Pratique des Maladies de la Peau." Par Alph. Devergie. Second Edition. P. 533.

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employed thus:—The hair is cut as short as possible, the crusts removed by means of cataplasms, and the plaster applied in strips, so as to fit the head accurately. It is left on for a few days, so that the hairs in growing become firmly adherent to the plaster. The end of each strip is then seized and suddenly and forcibly removed, dragging along with it a number of the hairs. This operation is repeatedly performed, and extends over a period of several months in many cases. The practice has sometimes proved successful; but only so when, by it, the whole of the diseased hairs are removed, but unfortunately, in many cases, this cannot be accomplished, and in too many others the operation is too painful and cannot be borne, and instances of death from this cause have been recorded. It is adopted, however, by Baumès, of Lyons, and by the Sisters of Charity at Toulouse, in which town, curious to relate, the municipal administration has interdicted the Physicians from treating favus, the care of the children so affected, being confided exclusively to the Sisters of Charity. This absurdity is carried to a great extent in Paris also, where the St. Louis Hospital counts the Frères Mahon (the quacks) among the Medical staff. This was somewhat excusable many years ago, for then the parasitic affections of the head were certainly better treated by them than by others; but now that the treatment proposed by Bazin and adopted by Hardy is proved to be better than that of the Frères Mahon it seems to be highly improper, and a great insult to the distinguished Physicians of that Hospital, that such charlatans should still be retained in office. For of all kinds of quacks, those are decidedly the worst, who, having discovered a useful remedy for a loathsome disease, prevent the public from profiting by it, retaining it as a secret, for the purpose of advancing their own interests, and filling their own pockets. The process of the Frères Mahon is somewhat the following:—The hair being cut short and the crusts removed by poultices and soap and water, *a marvellous powder* (to use Bazin's expression) is applied and the hairs are then removed by combing, and by pulling out as many as possible with the fingers. Bazin remarks that the epilation by this means is often impossible, in which case they (the Frères Mahon) have no scruple in having recourse to his method of epilation with the forceps. According to the analysis of Chevallier, the depilatory powders of Mahon consist principally of slacked lime and the subcarbonate of potash (b).

The *best* way of curing favus is *decidedly* that by depilation and the application of parasiticides, as proposed and adopted by Bazin, and followed by Hardy and others. I have already explained so fully this method of treatment, when on the subject of tinea tonsurans, that it is not necessary to enter upon it here, as what we have said with regard to the treatment of the latter applies in every respect to the disease under consideration. The length of time required for a cure will vary of course according to the extent of the diseased surface. When it is very limited, a cure is effected in a few minutes, as in the following cases, cited by Deffis in a pamphlet bearing this eminently French title—"Refutation of the Errors which M. Devergie's Book contains:"—

"March 16, 1854.—Léon Dufour, aged six months. Two cup-shaped favus-crusts on the back part of the head. Cured in a single sitting, on the 16th March, 1854.

"December 9, 1854.—Julie Laporte, aged 10 years. One favus-cup on the summit of the head. Cured in a single sitting, on the 9th December, 1854.

"March 30, 1855.—Alfred Hubert, aged 6 years. Four small favus-cups on the scalp. Cured in a single sitting, on the 31st March, 1855." (c)

In these cases the number of crusts is certainly very small, but, notwithstanding, there is no treatment but that under consideration which is capable of producing a *radical* cure in nearly so short a space of time. When the disease is very extensive, affecting the whole scalp, the depilation of the whole diseased surface must of course be undertaken and often repeated; and in such cases the duration of the treatment may extend over a period of from six to twelve weeks, in which time the most obstinate cases should be *radically* cured; and this is what can never be effected under any other treatment whatsoever. I am well aware that in Hospital practice many Physicians are content with removing the crusts, and applying stimulating washes, attending to the general health, and dismissing the patients with *clean heads*, and *apparently* cured, after a couple of weeks' treatment; but these are not instances of cure at all, for whenever the local applications are stopped the crusts reappear. No favus can be said to be radically cured unless the head remains perfectly healthy for some months after the cessation of all local treatment. Those, however, who are conversant with the disease, and the treatment by epilation and parasiticides, soon learn when to pronounce a cure; for to an experienced eye the appearance of the skin of the scalp and of the hairs, more especially, is a sufficient index of the eradication or non-eradication of the disease. But on these points it is not necessary to enlarge further, for they have all been discussed previously. (See treatment of tinea tonsurans.) The method of removing the favus crusts before proceeding to epilation is by the use of cataplasms, or by the application of oil, which softens them, and causes them to *swell* and lose their attachments to the skin, after which they may be scraped off with a spatula. This is the method adopted by Hebra. Instead of oil, he sometimes makes use of alcohol, which has exactly a contrary effect on the favus crusts, causing them to *shrink*, and thus lose their attachments, when they fall out, or are removed with the spatula. With regard to the parasiticide lotions and ointments the remarks made with regard to them under the treatment of tinea tonsurans apply equally to Favus. Küchenmeister made a series of very interesting experiments, in order, as he says, "to test the parasiticidal effects of the most urgently recommended remedies," and he found that *alcoholic solutions* acted most powerfully in this manner:—At his request applications of alcohol were made to the heads of some patients affected with favus by Hebra, and apparently with great success (d). Notwithstanding this statement of Küchenmeister's, I find in a later publication that Hebra considers the application of the so-called parasiticides as useless, there being, he says, no medicine which is known to act in this way (e). This opinion is not shared, however by most dermatologists.

Bennett, who is of opinion that the disease is parasitical, but occurs in scrofulous constitutions, recommends the use of cod liver-oil internally. Locally also after the removal of the crusts with poultices, he applies cod liver-oil, which, as he says, by excluding the air, causes the death of the parasite. I am told however, by my friend, Dr. Stewart, of Edinburgh (formerly Dr. Bennett's clinical assistant), that this treatment is merely palliative, and certainly the cases cited in Dr. Bennett's valuable work on Clinical Medicine (Second Edition, pp. 790-794) are not very encouraging.

After what has been said, it will be seen that the local is the only treatment capable of effectually curing favus; but at the same time, in this, as in all local diseases, the general health must be attended to, and any deviations from a natural state corrected when possible. Cleanliness must, above all, be insisted on, combined with the use of good food, and the enjoyment of exercise, pure air, etc. The principles of treatment above sketched out are always efficient in curing even the worst cases of favus; and we hope that, as it comes more extensively into practice, cases of favus described as *incurable* will cease to be recorded, for since the depilatory treatment of Bazin has been instituted, the word *incurable*, when applied to favus, has become quite inapplicable.

The remarks above made apply to favus attacking the hair-follicles. In the epidermic variety depilation is not necessary, the application of a parasilicide lotion as a solution of the bichloride of mercury (two grains to the ounce of water) being quite sufficient to remove it. When the disease attacks the nails the treatment is also simple. It is necessary to destroy gradually by means of a small file the portion of nail covering the favus matter, and after arriving at it the application of a parasiticide is quite sufficient to destroy the fungous growth.

(To be continued.)

(b) "Traité Pratique des Maladies de la Peau et de la Syphilis." Par C. M. Gibert. Third Edition. Vol. i. p. 343.

(c) "Réfutation des Erreurs que contient le Livre de M. Devergie." Par M. Deffis. P. 27. Paris: 1857.

(d) Küchenmeister's "Manual of the Animal and Vegetable Parasites." Sydenham Society's Translation. Vol. ii. p. 258.

(e) *Allgemeine Wiener Medizinische Zeitung* for 1858. P. 91.

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REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

CONDUCTED BY
JONATHAN HUTCHINSON,
Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital,
AND BY
J. HUGHLINGS JACKSON, M.D.

DIABETIC CATARACT.

In the Ophthalmic Hospital Reports, Vol. I., p. 273, for January 1859, is a paper by Mr. France, in which he drew the attention of the Profession to the relation sometimes existing between cataract and diabetes. Previous to this, there had been scattered in the works of Ophthalmic writers and others, mention of the coincidence. In a second paper on the same subject in Guy's Hospital Reports, Mr. France names Mackenzie and Duncan, as having incidentally alluded to it, and subsequently to his paper Professor von Graefe and Dr. Willshire have written on the subject. [Mr. France has from various sources collected twenty-one cases, and from the consideration of them, he arrives at the following conclusions:—

"The cataracts have in every example been symmetrically developed on both sides; the lenses have increased remarkably in their antero-posterior diameter, so as to encroach upon the depth of the anterior chamber, and even to interfere mechanically with the free play of the iris. The opacity has attacked portions of several strata of the crystalline at once, leaving intermediate spaces for a while transparent. The colour and bulk of the cataracts have invariably indicated their soft consistence, which was proved by operation in two persons, though respectively of 'middle,' and of forty-eight years of age. Lastly, the ocular affection has only arisen after considerable duration of the renal malady (a circumstance which may tend in some degree to account for the comparative rarity of their union); and there has, in no case, been reason to suspect further disease of the eye-ball."

GUY'S HOSPITAL.

(Under the care of Mr. FRANCE.)

Susannah P., aged 31, was admitted into Guy's Hospital December 20, under the care of Dr. Owen Rees, for diabetes. She had then been ill fourteen months. In October last, her sight began to fail in the left eye. On admission, by the aid of atropine, soft cataract was seen in this eye, and subsequently it was found to be developing in the right. She was then transferred to the care of Mr. France, under whose care she is at present. She had the usual symptoms of diabetes, into which it is for our present purpose needless to enter. Her urine during the stay in her Hospital varied in sp. gr. from 1040 to 1035.

In reference to operation, Mr. France states,—"My experience would lead me strenuously to deprecate any operative interference with them, so long as useful vision is preserved, and to adhere to palliative treatment by mydriatics for a longer time than in ordinary cases of cataract would be expedient or right. This recommendation is chiefly founded on the indisposition of the cornea to heal even the minute wound inflicted by a needle." When the period arrives when vision is almost lost and when the general condition of the patient is such, that the restoration of sight would be very desirable, Mr. France recommends the operation of keratonyxis.

The following case is extracted from the writer's note-book, under date August 1850, at which time the patient was an inmate of the York County Hospital. At that time, the knowledge of the connexion between diabetes and cataract had been scarcely mentioned in print. It was, however, well recognised by many practical Surgeons, and among others, by Mr. Russell, under whose care the patient was. We well recollect his adverting to the fact of the occasional concurrence of the two diseases.

THE YORK COUNTY HOSPITAL.

PHTHISIS, DIABETES, AND CATARACT.

(Case under the care of the late Mr. RUSSELL.

E. P., aged 19, residing in a neighbouring village, was admitted on August 22, 1850. She had been the subject of diabetes for five years. She was pallid and extremely ill. Her tongue was red, and she was liable to occasional diarrhœa. Her skin exhaled the peculiar odour of diabetes. Her appetite was inordinate. The urine was large in quantity and loaded with sugar. There was evidence of tubercular disorganisation in the apices of both lungs. Both lenses were opaque. In the right, the opacity appeared to be in front of the lens, while in the left, in which the opacity was much slighter, it appeared more distant. She remained in the Hospital about four months, during which time the cataracts advanced, and she became almost blind. She could still, however, distinguish between light and darkness. Various tonics, cod-liver oil, creosote, opium, etc., had been used, but without any permanent advantage, and the quantity of urine never permanently diminished, and the specific gravity did not decrease. She at length left the Hospital, in order to die at home. It is, perhaps, worthy of note that the patient attributed her first failure of health to her having lived in a situation, where she was obliged to be up for several hours before taking food.

The subject is one of great interest in another way, as illustrating the value of the study of disease by synthesis. In our pages for March 31 and April 21, 1860 (a), will be found detailed accounts of the experiments of Dr. B. W. Richardson, on the artificial production of cataract. He shows that artificially-produced cataract occurs as a purely physical change—from osmosis—a tendency to equalise the density of the fluids within the lenticular capsule, by transudation to the surrounding fluids, for he observes that the cataractous condition can be removed by reversing the conditions—by placing the animals experimented on in water. All varieties of sugar, cane, grape, and sugar of milk, produce the same result. Just, however, as we find that in many cases of cataract there is no diabetes, so Dr. Richardson found that the introduction of other substances into the system than sugar would produce cataract. Thus salines, as chloride of sodium, would develope the cataractous condition, and hence Dr. Richardson's remark—There may be a saline cataract as well as a diabetic one.

Sugars and the various salines produced the same general effect, with the exception of the iodide of potassium. This salt did not produce any effect in any instance. Dr. Richardson says, "I do not pretend to explain this curious and remarkable fact." Chloride of sodium, a salt of the same chemical type, readily produces cataract.

In the majority of instances the opacity begins at the posterior surface of the lens, but sometimes in the anterior surface. The capsule of the lens is unaffected. Dr. Richardson found sugar in the opaque lenses after removal. There was always a difference in the general character of the opacity produced by various substances. As a rule, the opacity became more marked after death; but in the case of the sulphate of potash it disappeared altogether. Dr. Richardson says we should look for cataract especially in those cases in which profuse diuresis is absent; for in those in which the sugar is eliminated as fast as it is manufactured, no cataract is likely to be formed: for as he points out, sugar produces cataract by increasing the specific gravity of the fluid, and not by any specific power. He reminds us that we may find that an opposite condition of the fluids may exercise a deleterious influence on the lenses, not by impairing their clearness, "but by excessive transudation (endosmosis) and distension."

Opacity of the lenses may be produced by saline and saccharine fluids introduced into the anterior chambers of the eyes of animals recently killed, or by immersing the removed eye in the solution. In these experiments, however, the effects were much more slowly produced, and the changes were less intense.

Dr. Richardson also experimented with the acid urate of soda. The salt was suspended in water by gum-arabic (the

(a) See also Dr. Brown-Séquard's "Journal," July, 1860.

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injection of gum does not produce cataract), and injected under the skin of two frogs. In neither of these experiments was any opacity of the lens produced. He also gave a bitch night and morning with her food a drachm and a-half of urate of soda, and after a week the quantity was increased to two drachms. She took this for fifteen weeks. The experiment was commenced on March 2. In April it was evident that the animal was becoming blind, and "the eyes through the pupil were opaque-looking, and the animal ceased to observe objects, even those near her." The eye was, however, examined by the ophthalmoscope by Mr. Wordsworth, and no cataract was discovered, except the merest opacity in one lens. Mr. Wordsworth believed the white appearance to depend on white discoloration of the retina. When the urate was given up, the animal recovered her sight gradually, and ultimately could see as well as ever.

GUY'S HOSPITAL.

DISEASE OF THE ANKLE AND TARSAL JOINTS—PIROGOFF'S AMPUTATION—RAPID RECOVERY WITH AN EXCELLENT STUMP.

(Under the care of Mr. BRYANT)

Edward N., a policeman, aged 29, was admitted on February 25, 1860. He had been a regular liver and a steady man, and had enjoyed, as a rule, good health. For two years, however, he had suffered from some disease of the joint of his right index finger, which required amputation; and, nine months prior to his admission, the tarsal joints of his left foot first showed evidence of diseased action. Without known cause or any injury the foot began to swell. The enlargement was very gradual, and only at times caused pain. For three weeks sinuses had existed. His health was also becoming gradually impaired. When admitted the bone was much enlarged, and all the points of the bones were lost in the general inflammatory thickening. Many sinuses existed leading down to exposed and roughened bone. The integument of the heel was sound, leading Mr. Bryant to suggest Pirogoff's amputation, as it was evident some operative interference was imperatively demanded.

On September 3 the operation was performed. Mr. Bryant made his first incision from the posterior part of one malleolus to the like point on the corresponding one, dividing everything down to the bone. He then applied the saw to the exposed os calcis, and, directing it obliquely upwards and backwards, divided this bone, leaving its posterior portion in the heel flap, care being taken not to injure the posterior tibial artery. He then made his anterior incision across the ankle, divided all the soft parts and tendons passing over the lower portion of the tibia, and, having sawn through the bone just above the ankle-joint, the operation was completed. He then, by three strong pins, brought up the heel and united it to the integuments in front.

A steady convalescence followed, the man's health improved, and the stump healed. In three months afterwards he was able to bear his full weight upon the limb, no amount of pressure causing pain. Mr. Bryant remarked that the stump presented an admirable illustration of the value of Pirogoff's amputation, imparting the lesson that, where it can be performed, it is far superior to any amputation at the ankle joint, the heel forming such an excellent pad for subsequent support.

COMPOUND FRACTURE OF THE SKULL—EPILEPTIFORM CONVULSIONS—TREPHINING—DEATH—AUTOPSY.

(Under the care of Mr. BRYANT.)

[Reported by Mr. UNWIN.]

Thomas C., aged 37, was admitted into Guy's Hospital, January 18, 1861. He states as the cause of the accident for which he is admitted that he fell from a loft into a stable, and probably on to some projection. He was picked up insensible, but had recovered his consciousness sufficiently to answer questions rationally when brought to the Hospital. On examination, there was then found extensive depression of bone in the right temporal region, and a clean incised wound about half-an-inch long, which had severed a small branch of the temporal artery. He also spat up some blood, and complained of his wrist having been sprained by the fall. 9·15 p.m., one hour and a quarter after admission, he had an epileptic fit, and at 10·30 Mr. Bryant was sent for. He decided at once on the operation of trephining, and elevating the bone. Just before the operation it was observed that the pupils acted under the influence of light, although they appeared to be slightly dilated. There was no paralysis. A piece of bone, about the size of a shilling was removed by the trephine, and the depressed portion elevated, some effused blood making its escape. The dura mater was found torn through at the seat of fracture, and a small artery which was bleeding, and which evidently came from within, was compressed with a sponge tent. Immediately after the operation the patient revived. 2·30. p.m.—The patient expressed himself as being greatly relieved by the operation. Milk diet.

19th.—He has passed a quiet night. Pulse 80. Skin cool. He was ordered a dose of castor-oil, and also four grains of gray powder, and four grains of Dover's powder, twice a-day.

20th.—The sponge was removed. No hæmorrhage followed. Bowels open three times. He sleeps very well. The patient appeared to progress favourably until the evening of the 23rd, when his skin became hot, his pulse rose in frequency (104), his tongue became dry in the centre. Five grains of Dover's powder were given, and the powders ordered on the 19th were still continued.

24th.—He seems restless, answers questions put to him rather slowly. His eyes are staring. The head to be shaved, and spirit lotion applied. 6 p.m.—Pulse 112, full. Tongue very dry. The dura mater is seen to be dry and glazed, but it still pulsates. To take the gray powder without the Dover's powder. 7·20 p.m.—Pulse 108. Bowels open. He is conscious, but is unable to speak or open his mouth. There is no paralysis. He is directed to omit all medicine. 3 a.m.—Pulse 128. He now passes his motions and water in bed involuntarily, and there is slight paralysis of the right side, but no delirium nor any twitchings.

25th.—The paralysis is now marked, but the pupils still act under the influence of light. Pulse 120. 9 p.m.—The breathing has become stertorous, and his skin is bathed in perspiration. Pulse 172. He lingered on until 2·30 a.m., when he died.

Autopsy.—On examination the cranium was found to have been fractured on the right side to the extent of a five shilling piece, or rather more. The centre of this fractured part was driven inwards on to the brain, a number of pieces of bone converging from the circumference to this point, where they were tolerably firmly fixed by the attachment of the temporal muscle. One or two portions had been removed by the operation. Proceeding backwards and forwards from this circular hole was a fissure three or four inches long, extending forwards through the frontal bone and backwards in the same horizontal direction. The dura mater was torn; it was also soft and sloughy. On removing the dura mater, acute arachnitis was seen affecting more or less the whole surface of the brain, but especially over the left hemisphere. It was here so thick that a layer of lymph covering the brain prevented the cineritious matter from being visible. The lymph was altogether beneath the serous membrane. On the right side the lymph was in less quantity, but in addition there was much free purulent matter on the surface of the arachnoid, the dura-matral arachnoid being covered with inflammatory product. Lymph was also found on the sides and base of the brain, but in less quantity. The brain showed evidence of having been directly injured at the site of the fracture. The cineritious matter was soft and contused. There was also a breach of surface, made, no doubt, by a portion of bone. All the neighbouring parts were of a green colour, although it did not extend deeply. There was no internal injury, the central parts of the brain being quite natural.

ST. BARTHOLOMEW'S HOSPITAL.

FIBROUS TUMOUR OF THE ANTRUM, WITH PULSATION—EXCISION—RECOVERY.

(Under the care of Mr. PAGET.)

The subject of this case was a very healthy-looking lad, aged 18. He said that, seven years ago, a swelling of the face commenced, which had gradually increased up to the time of his admission under Mr. Paget's care.

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December 18.—There is now on the left side a general projection of the cheek. On examination this is found to be due to prominence, chiefly in three directions, connected with the superior maxillary bone. It projects just below the malar bone and above the alveolus, and thence upwards and into the orbit, displacing the eye for at least a quarter of an inch. There is no yielding in the first direction, and very little in the one in the orbit, but in the last situation, where it is not covered by bone, there is slight but well-marked pulsation. The diagnosis is that of tumour, originating in the antrum, which has entered the orbit through an opening in its floor. It has not at all encroached on the nasal side, nor is the palate or alveolus depressed.

Before the operation Mr. Paget remarked, that the directions of the extension of the growth supported the opinion of its being a fibrous tumour in the cavity of the antrum, rather than a tumour of the bone itself. The parts of the maxilla over the tumour felt firm and unyielding, but the tumour, where it had escaped into the orbit, communicated a slight feeling of pulsation to the finger. This was very slight, but it was very decided, and it was synchronous with the radial pulse. In reference to this symptom, Mr. Paget said that, taken alone, it was a symptom of malignant disease, but in this case it was the only one. The excellent health of the patient, the very gradual growth, and, as he believed, its not affecting the bone, rendered that idea quite untenable. There were cases, he added, in which hard tumours pulsated. It was difficult to give a satisfactory explanation. Sometimes it appeared to be due to an artery overlying the tumour. There were cases in which tumours of bone pulsated without any apparent excess of vascularity. In reference to the operation, Mr. Paget said that he should endeavour to remove the tumour from the mouth, without cutting through the cheek, and he should, if he did not succeed in doing so, endeavour, at least, to save the alveolous and palate.

Chloroform having been administered, Mr. Paget made an incision down to the bone above the alveolus, separated the cheek for a little way, and then, by a Hey's saw, cut into the antrum. It was not, however, possible, in such a small wound, to open the antrum freely. He therefore made an incision in the cheek, commencing near the angle, and carried upwards in the direction of the outer commissure of the eye, for about an inch and a-half. He then removed, by the saw and cutting-forceps, part of the anterior wall of the antrum and a little of the attachment of the malar bone, and from this opening he was enabled to remove the tumour. It filled the antrum and extended upwards into the orbit, not only in front, where it was present before removal, but also largely into the back of that cavity. The tumour was removed almost entire. It was smooth on its surface, and grew from the wall of the antrum, the portion removed, by a small attachment. It was larger than was expected before removal, about the size of a small orange. On section, it was white, firm, tough, and yielded no juice on scraping. It was, Mr. Paget said, an ordinary fibrous tumour,—the most common form of tumour which was found in the cavity of the antrum.

March 4.—The operation was performed on December 18. The boy has done uninterruptedly well and is now about, only a very small part of the wound on the cheek remaining unhealed.

ANEURISM OF AORTA—SUDDEN DEATH—EFFUSION OF BLOOD INTO THE RIGHT PLEURAL CAVITY.

(Under the care of Dr. FARRE.)

[Reported by Mr. FREDERICK MARSH.]

William H., a large, powerfully-made man, aged 62, was brought to the Hospital dead. Very little was ascertained as to his history, except that he had been of very intemperate habits. As far as could be ascertained, he had not been under Medical treatment during life. He was observed to fall in the street, and was brought at once to the Hospital; but though alive when taken up, he died before he reached the Hospital.

Autopsy.—The bones of the skull were very thick and hard; the dura mater was firmly adherent in many places to the bone; the arachnoid was opaque, and raised from the pia mater by serous fluid, which was present in all the subarachnoid spaces; there was no flattening of the convolutions; the brain-substance was firm and healthy; the ventricles contained more fluid than natural.

Thorax.—On opening it, it was noticed that the heart was somewhat displaced downwards and towards the left side, and that the lungs, instead of being in contact at the upper part of the chest in front, were separated from one another by a large tumour. The right pleural cavity, which was free from adhesions, contained two pounds and eight ounces of dark-coloured, jelly-like coagulum (no portion of it decolorised), besides a considerable quantity of bloody serum. The right lung was evidently emphysematous, but had been much altered in shape by the large quantity of effusion. (The emphysematous condition of the lung allowed it to be readily altered in shape by the pressure of the blood; and probably a great portion of this alteration had taken place after death.) The left pleura was natural. The left lung was emphysematous. The pericardium was quite healthy; there was no blood in its cavity. The heart was somewhat larger than natural; its right cavities, with three valves, were normal. The left ventricular cavity was scarcely at all dilated; its walls were somewhat thicker than natural. The aortic valves were not contracted, but contained some atheromatous deposits. The mitral valves were healthy.

Aorta.—The first portion was much dilated, and in its walls was extensive atheromatous deposit; this portion did not form part of the aneurismal tumour. The second (transverse) portion was dilated into a large globular swelling, about the size of a large orange. The walls of the aneurism seemed to be formed by all the three coats of the artery, though very much thicker. There was very extensive atheromatous deposit throughout, the sac feeling rough and gritty to the finger; at the posterior part its wall was strengthened by thick laminated fibrinous deposits. The cavity itself contained some blackish clot. The coats of the descending aorta were similarly affected; but this portion of the artery was not involved in the aneurism; neither were the carotid, subclavian, nor the innominate affected. The aneurism had not caused any absorption of the sternum, ribs, or spine. At the posterior and upper part of the aneurismal sac, and somewhat towards the right, was a round opening of about the size of the tip of the finger; this communicated with the posterior mediastinum, and lay immediately behind the right phrenic nerve and vena cava. Through this opening blood had been effused into the posterior mediastinum, forming a second globular tumour of the size of an orange. The pleura covering this had given way at its upper part, and it was through this opening that the blood must have found its way into the right pleural cavity.

THE LONDON HOSPITAL.

CASE OF SEVERE GOUT—AMPUTATION OF ONE FINGER.

(Under the care of Mr ADAMS.)

The following case is an instance of gout occurring in a much more severe form, and with a much greater liberality as regards the tophaceous deposit, than we usually meet with in Hospital practice. The subject of it is a man named Woolf A., a Jew, aged 50. He states that his mother, who was a Spaniard, and died at the age of 70, had for twenty years suffered slightly from gout in one finger. His father never had it, nor, as far as he knows, any of his paternal relatives. He has six brothers and sisters, two of them being younger than himself. Only one besides himself has suffered from gout. This is an elder brother, who died, aged 60, of what was called "rheumatic gout," having suffered severely for many years.

Woolf A. is a general dealer, and has lived much abroad, especially in Australia. He says that he has preferred beer to wine, but has been strictly moderate, and never drank much of either. His first attack of gout occurred at the age of twenty-five, when one finger was affected. Since that he has often been laid up, for three or four months at a time, with gout in his feet and hands. At the time of the first attack he was a footman in a wealthy family, but he will not admit that even there he drank much wine. He says that he never ailed anything excepting the gout. His knuckles fingers, and toes, are all of them greatly and irregularly enlarged from chalky deposits, and over each olecranon is a lump of chalk as large as a small orange. In each ear there was a deposit the size of a pea. The deposits are roughly

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symmetrical. He applied to Mr. Adams on account of ulceration over a large mass of chalk on the ring finger of his right hand. The ulceration had caused him much pain, and had made him wish for its amputation. Mr. Adams performed the operation. On examination the gouty material was found deposited in large masses beneath and upon the various bones. It also existed on the free surface of the joints. The joints were none of them anchylosed, but were immoveable, in masses of lithate of soda, which surrounded them. The parts healed well afterwards.

LOUGHBOROUGH INFIRMARY.

CASE OF POPLITEAL ANEURISM—LIGATURE OF THE FEMORAL—SECONDARY HÆMORRHAGE—RECOVERY.

(Under the care of Dr. J. H. EDDOWES.)
[Reported by Mr. R. MORRIS, House-Surgeon.]

John G., aged 35, was admitted on Thursday, May 5, 1859, with an aneurism of the right popliteal artery. This was noticed for the first time a month previous to his admission. For five years he had been gamekeeper to a gentleman in South Wales. He was not aware of having sprained himself or received any injury to the limb.

May 5.—Pale and anxious appearance; tolerably muscular; pulse 88; not able to put his foot to the ground in consequence of the severe pain caused in the attempt to extend the limb. The swelling in the popliteal space measures about five inches by two. Pulsation in the tumour very distinct, and it can easily be emptied, pressure being made over the femoral; around the knee, and also the foot and ankle, there is a good deal of œdema. It was determined to commence with the treatment by compression. The ordinary tourniquet with strap and pad was applied this day (May 5), but it was found necessary to discontinue it after four or five days, on account of the swelling of the limb—although it diminished materially the pulsation of the tumour.

16th.—Signorini's tourniquet was applied this day about two inches below Poupart's ligament. With this application the pulsation almost entirely disappeared. In two days it was removed an inch lower, where the pressure was borne better; here, however, in about three days, the skin threatened to slough, and it was found necessary to place it on a fresh situation, viz., about the middle of the thigh. Pulse since his admission has averaged about 85 to 90.

June 9.—As the above tourniquet had not the desired effect alone, a second was applied about two inches below Poupart's ligament, and the other about four or five inches lower. So irritable indeed was the skin that it was found necessary to change the position of each instrument on alternate days. Despite the continued application of the tourniquet the tumour increased rapidly, and was now nearly the size of a fœtal head, the walls of the swelling gradually becoming thin, and the skin around discoloured. Much more pain is felt in and around the knee.

24th.—Since the 20th the tumour has enlarged materially, so as to render the operation imperative.

25th.—The operation for tying the femoral was performed. Chloroform was administered. Some little difficulty was experienced in cutting through the parts, in consequence of the hard and thickened state of the integuments, the result of the continued application of the tourniquet. A ligature was placed round the femoral which completely arrested the pulsation in the ham. He bore the operation well, but during the whole night complained of excruciating pain from the knee to the ankle. Evening, pulse 120. Ordered an opiate.

26th.—Has passed a tolerably good night; countenance more placid; pulse 100; temperature of the limb, 98.

July 1.—Since the last report the pain complained of seems gradually disappearing, and the temperature of the limb is maintained without difficulty, being about 96. The wound is diminishing slowly in size, and the wound over the femoral is healing nicely.

11th.—The ligature came off to-day, being the sixteenth day after the operation. There continues to be a good deal of œdema about the foot and ankle. Tumour slowly decreasing. The opiate has been continued every night since the operation.

August 1.—Now gets up daily and is improving in general health. Tumour gradually diminishing, but the wound left after the operation has not healed so kindly since the last report, as a sinus remains under the integument hardened by the continued application of the tourniquet, and which is not disposed to heal.

16th.—For the last week he has gone about the ward on crutches. Complains of very little pain either in the sinus over the femoral, which is nearly healed, or in the tumour.

27th.—Since the last report he has been going on favourably, and improving in health. Tumour in ham diminished exceedingly; seems to-day as well as usual. The sinus spoken of would now admit an ordinary director. It discharges a little purulent matter. About eight p.m., while sitting in a chair, a sudden rush of arterial blood took place from the sinus left where the femoral was tied, in amount about half-a-pint. A good deal of bulging of the upper and inner part of the thigh, indicating extravasation, accompanied with excruciating pain. Pulse has risen from 85 to 110. A wet compress of lint was applied, which partially arrested the hæmorrhage, together with a bandage applied to the limb from the foot upwards. Ordered a pill containing acetate of lead and opium every four hours. The opiate as usual at night.

27th.—Has passed a restless night. There has been constant oozing of blood; the bulging in the upper and inner part of the thigh increased, indicating that extravasation is going on. Pulse 120.

28th.—About eleven a.m. another gush of blood took place, amounting to about six ounces, and it was found necessary to remove the compress in order again to examine the parts. As the oozing was disposed to continue, another compress was applied, and the limb bandaged as before. The pills to be continued.

29th.—No hæmorrhage since last night, when the pad was applied. There is a good deal of erythematous redness of the thigh extending from the wound to the lower part of the buttock. Pulse 110.

30th.—A little oozing of blood took place to-day, but not sufficient to be of any importance.

31st.—Less restless. Pulse quieter, 105. An erythematous blush around the wound. The wet pad which was applied on the 29th was removed, and underneath it there was a deep, irritable sore, excavated and discharging some grumous blood. No pure blood escaped. Another wet pad rather smaller in size was applied with a roller as before.

September 2.—The pad over the wound has been removed daily, and the sore dressed with simple ointment. Being very feeble, was ordered ʒij. of brandy. To continue the pills three times a-day.

4th.—The wound continues to discharge matter mixed with decomposed clots of blood. He is not so restless; appetite improving.

12th.—The wound heals rather slowly. There has been no more oozing of blood. Has left off taking the lead and opium pills four days ago.

October 20.—The wound has healed, and the parts around are firmer, but rather tender. Is able to bend his knee to an acute angle, but there is still œdema of the leg and foot, so that a bandage is kept on in the day time to give support. The skin covering the aneurismal tumour has resumed its normal appearance, and the tumour itself has subsided to one-fourth its original size.

The case was deemed on admission a favourable one for treatment by compression; but, in consequence of the irritable state of the skin, he was unable to bear the pressure of the tourniquet for any length of time on a given spot. Nor was he a subject fitted for treatment by flexion of the limb, as he was unable to bear it bent to a sufficient extent. In this case an objection to the tourniquet seems to be the hardened and thickened state of the structures over the course of the vessel, rendering the operation of tying the femoral more tedious and difficult in case it were necessary. A second objection was the non-disposition of the parts to heal after the completion of the operation.

The cause of the hæmorrhage in this case was rather obscure. It does not seem likely that it came direct from the femoral, but most probably from some branch through which the collateral circulation was carried on. When last seen, about three months ago, he seemed apparently well, and had been so some time. Could extend the knee without pain. The tumour itself nearly gone.

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Medical Times and Gazette.

SATURDAY, MARCH 9.

THE POOR MAN'S HOME.

A GREAT many things were formerly spoken of as being "beneath the dignity of the Physician." Thus, in the last century, it was considered that the diseases of infants were scarcely a sufficiently dignified subject of attention; and in this, we fear that there are some of us willing enough to expend any conceivable labour in making out the diagnosis, or prescribing the treatment of a disease, or even the unsavoury task of collecting the post-mortem appearances, who yet would hardly condescend to notice the causes, or step out of our path to prevent them. But in proportion as the educated portion of the public know more and more of the true function of physic, so will they value prevention above cure,—prevention, exercised on behalf of the public as a distinct function, when studied and perfected, will not fail of its reward. In a Civil Medical Service it must have a large place.

In order to help on the study, we propose from time to time to give an article on Hygiene, or the mode in which health is influenced by the conditions which surround us in our daily life and work. In doing so, we shall lay aside all the traditions of the gold-headed cane school, and seek usefulness rather than dignity. Nothing that acts upon the lives of our brethren shall be too low for us. To-day we shall speak of the Poor Man's Home. It is a subject, indeed, which comes up from time to time, and is put before the public with a certain amount of details which are pronounced "very shocking," and there the matter rests. There it rests, we say; for although we are by no means forgetful of that admirable movement which caused the new model lodging-houses to be erected, nor yet of the continuous improvements made in several parishes where the Medical Officers of Health are sufficiently active and independent, yet we affirm that society is not at all alive to the evils which arise from the present homes of the poor, and that our Profession has become, as it were, inured to them, and takes them as matters of course. The Parish Surgeon and the District Lady-Visitor meet at the poor man's threshold, and exclaim, "What a shocking atmosphere these people breathe!" and away they go, subscribe money for tracts, Temperance Societies, Dispensaries, Reformatories, missions to the heathen, soup, coals, blankets,—relief, in fact, of every kind except that which shall go to the root of physical evils,—the permanent improvement of the poor man's home. They do not give the physical conditions under which health and virtue shall be possible, although they are willing to mend broken health and patch up frailty. To say that model dwellings *don't pay*, or that 2 per cent. is the utmost to be expected from them, is nothing to the purpose. Does the Patagonian Mission Society pay? How much per cent. is received by those who give to churches, schools, public monuments or works of art? There are solid returns from works of benevolence, although they are not in the form of hard cash; and some of these we are sure would flow from the reconstruction of the dwellings of the poor.

The subject was brought before the House of Lords last week by Lord Derby, who presented a petition from the Incumbent of St. Bartholomew's, Moor-lane, complaining that a Metropolitan Railway Company proposed to make a line through the parish, and thereby to destroy the dwellings of 2000 out of the 5000 poor inhabitants. It was alleged that this measure would be a great hardship to the poor persons thus displaced and obliged to seek lodgings elsewhere, and that it would drive the unhoused people to take refuge in the already overcrowded houses that remain.

Then followed the usual statements showing the nature of the houses which it is proposed to destroy. Lord Shaftesbury described courts in the city where 250 houses were sublet to 1133 occupiers, whose families amounted to 5665 persons; the average number of each family 5, the average rent 2s. 4d. per week. In Cowcross, 173 houses contained 586 rooms, tenanted by 586 families numbering 3764 persons.

But from inquiries we have made, we are certain that whatever may be the condition of poor dwellings at Cowcross, it is the same, in certain essentials, all over London. There are certain fallacies which spring from a hasty perusal of statistical records. We see, for example, that the population in the Strand District is said to be crowded at the rate of 316 persons per acre, while the density of St. George, Hanover-square, equals 63 persons per acre. In like manner we read that the death-rate in Bloomsbury is 23 per 1000, whilst that of St. George, Hanover-square, is 17. But statements of this sort are deceptive. Our inquiries lead us to believe, whatever part of London you take, if you compare like classes of the community, that their dwellings, rent, habits, diseases, and mortality, are very nearly alike; that in a parish where there are spacious squares, and lofty mansions, and streets that abut on Hyde-park, inhabited by opulent persons who can go to any watering-place or climate when they feel ill,—there the general death-rate will be low; because the high death-rate of the poor, made higher by the proportion of infants and children, is mitigated by the low death-rate of the rich; or, to speak more properly, of the inhabitants of the better streets and squares, with their larger proportion of servants and other adults. Supposing, for example, it were alleged that the mortality of Grosvenor-square and its vicinity is 15 per 1000 per annum, it would be in the highest degree absurd to suppose that a poor man's chances of life would be much greater there than in some poor City parish, where the general mortality is 20 per 1000; the fact being that the death-rate of the Grosvenor-square District would be compounded of the low mortality of the Square, with the high mortality of that cluster of dark streets which intervenes between it and Oxford-street.

Thus it appears, from published reports and private memoranda with which we have been furnished, that the number of persons dying in the houses of the rich in the higher part of the parish of St. George, Hanover-square—that is to say, the older part of the parish, not Belgravia—is at the rate of 10 or 11 per 1000 per annum; whilst the number of persons dying in the back streets and mews in the same locality is at the rate of about 21 per 1000, exclusive of all who die in Hospitals and Workhouses.

The area of Grosvenor-square and its houses is 64,600 square yards, the inhabitants 500; the area of the district between it and Oxford-street 45,400 square yards; the number of inhabitants 2160.

We have before us the results of an examination instituted by Dr. Druitt into the condition of a small street in this locality. In 18 houses lived 93 families, 47 of whom, *at the least*, confessed that when ill they resorted to gratuitous Medical advice of some sort. This is a fact which deserves notice. Of the 93 families, 3 had 3 or more rooms, 26 had 2 rooms, 64 had 1 room each. In 61 rooms lived 162 people. The average cubic capacity of these rooms—poor houses—was 800 feet; the average rent, 3s. 5d. weekly. Of course there were great varieties in the prices, according to situation: for a kitchen of 1145 cubic capacity let for 2s. 9d., while a front parlour of 864 let for 4s. 6d. We learn that, taking this part of the parish as a whole, 80 per cent. of the poor

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who live in *houses* enjoy no more than one room each, with an average cubic capacity of 1000 feet, in which the average number of inmates is 3·7, and the average rent 3s. 4d. The *mews* and *stables*, unwholesome as some of them are, seem to be much less so than poor houses; the occupants are usually domestic servants with good wages, and the space they enjoy is greater.

From the foregoing facts and figures we infer that the lodgings of the poorer classes are much alike, wherever they may be, and great as may be the diversity of details,—hence it is not any matter of regret to us that an extension of railways should doom many of them to destruction, for there is no law whatever that can cause on old worn-out set of houses to be removed. If a house be condemned as dangerous structurally, the faulty part of the wall is cut out and rebuilt, floors and rafters are patched up,—dirty rooms may be cleansed, undrained houses may be drained; but we assert that, as things are, there is no possibility of getting old, ruinous, airless, sunless courts and alleys pulled down by any *direct* interference, and we can but feel grateful for the indirect interference of a railway scheme.

So much for the cubic space available for the purposes of a home. We may next turn to some other extracts, showing the condition, in other respects, of the poor residences in rich West-end parishes. Here is one from a report dated October, 1859:—

"This hot summer has tested our sanitary state pretty severely. Are we, judging from the results, in such a state as to face an epidemic with confidence? Supposing, for example, the cholera were to come over from Belgium? We fear not."

Then the report goes on to say:—

"There are some old houses, which stand upon ground so honey-combed with old drains and cesspools, so old, rickety, and ill-constructed, that they ought to be pulled down. No. 30, ——street is one. It was condemned by the Police Surveyor as a dangerous structure, and the front wall obliged to be pulled down and built anew; notices have been served, and fairly enough obeyed as to cleansing and draining, still the house is as unhealthy as ever." "Many other houses are so crowded together in courts, that there is no possibility for the escape of the effluvia which of necessity arise from latrines, sinks, and dust-bins. These effluvia must be inhaled by the poor, because the houses are such, and so closely congregated, that the air-supply of the apartments is inevitably tainted."

Whether the neighbourhood be Belgravia or Bermondsey, there is one constant peculiarity about poor houses—they are huddled out of sight, out of the sun, and out of the wind. People drive through broad streets and squares, and ask, "Where are the poor?" Through some archway, down some alley—anywhere, in fact, except in sun-light and fresh air.

Let us for a moment dwell on the purely domestic aspects of the case, and consider one or two of the minor details of these homes,—how far they can be said to answer the purposes of homes, even if situated in the midst of a plain with all the airs of heaven around. Early morning lets the murky daylight in upon a space fourteen feet long, by ten broad, and seven high. Of this area a bed occupies thirty superficial feet, bearing father, mother, and two children—the remaining two being curiously packed in at the foot, or else occupying a separate bit of bedding spread on the floor. The parents rise; how are they to wash in the presence of the children and of each other? The windows cannot be opened because of the cold; the door is thickly padded round to exclude draughts. The husband, possibly,—and this is the worst feature of poor dwellings in towns—carries on some trade, such as that of shoemaker, at home, and sits down to his work. The frowsy animal vapours are never got out of the place from year's end to year's end; the parish authorities may get such a room whitewashed once in two years, but with enormous difficulty; the children meanwhile—at the Orthopædic or Consumption Hospital—swallow cod-liver oil; the wife is on the parish doctor's books for "debility;" measles, whooping-cough, and phthisis flourish.

Where, then, are the poor to go, and how is the money to be raised to build them better houses? Whence, we ask in reply, comes the money for the new Botanic Gardens that are to fill up the precious vacant space at South Kensington? So soon as the public are aware, fully and really, of the dangers which ensue from an overcrowded population, and of the impossibility of providing a remedy on the natural laws of demand and supply, then help will not be wanting, and benevolence will be satisfied with indirect remuneration.

We heard a benevolent sanitarian say that if a fire should break out on the eastern side of Regent-street, and burn everything straight before it through Soho to St. Giles's, that humanity would be greatly benefited; and that if some few persons met with their deaths in the flames (always a quick and easy one), it would be but a slight sacrifice in compensation for the destruction of the nests of fever, and many of the infectious diseases which yearly produce hundreds of slow and painful deaths,—and we are disposed to agree with him.

THE WEEK.

Scarlet fever prevails among the schoolboys at Harrow, and one, if not more than one, lies dead at this moment. Under such circumstances, we hear with extreme surprise that the Head Master has resolved on not only not disbanding the school, but even on expelling any boy whom his friends or guardians may think it their duty to take home from this nidus of infection. This statement would have seemed incredible had we not received it from unquestionable authority. Assured of the fact, we feel it our duty to caution the Head Master of Harrow against his most imprudent resolution; for, should a boy thus retained by compulsion catch disease and die, the amount of moral, if not legal, responsibility which would fall on Mr. Butler is something which no man of well-constituted mind, such as we believe him to be, would desire to incur. We hope, therefore, that a resolution for which there can be no good foundation will be immediately abandoned, and that this gentleman will not, while he imposes on others the extremest hardships, entail on himself the risk of penalties which no amount of subsequent sorrow could absolve.

The sanitary condition of Paris has been attracting attention, and a controversy has arisen whether it be more unhealthy in 1860 than in 1760. Dr. Rigaud, on the one hand, affirms that emanations from gas-pipes do not affect the general health; that the smoke from the tall chimneys is carried away harmlessly by the breezes; "that the vast agglomeration of workmen in and around Paris is the cause of its wealth and magnificence;" and that the streets are wider and the drainage better than in former days. To this M. Lazare replies, that one hundred years ago, with a population one-fourth of what it is now, "the city was girt with ninety-seven magnificent parks, belonging to as many princely palaces, and intersected with the gardens of numerous convents, all tending to furnish a supply of pure air. Instead of this Paris is now surrounded with quarters consisting of narrow streets, containing miserable houses, inhabited by upwards of a million of working people, closely packed together, without the slightest attention being paid to their comfort or cleanliness, or to their due share of pure air and sunlight." The factories bring with them a population, three-fourths of whom may at any moment require you to feed them. The truth seems to be, that whilst old evils of the cesspool order are being abolished in London and Paris,

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new evils are introduced. The existence of an enormous area covered with houses, without intersection by gardens, is an immense evil; and the children of a town population will, from this cause, be sickly and shortlived.

M. Roubaud (who is doing for France in his Medical Directory what was accomplished by the energy of Mr. Yearsley in Engla: states that his Returns show that the number of French Medical Practitioners is on the decline. In 1857 the total was 18,023—viz. 11,258 Doctors, and 6765 *Officiers de Santé;* while in 1861, the numbers are 17,520, *i.e.* 11,242 Doctors, and 6278 *Officiers*. M. Roubaud attributes the diminution especially to the more severe regulations for the admission of the lower order of Practitioners, the *Officiers*. M. Latour, in *L'Union Médicale*, observes that this reason may be in part correct, and it could not be regretted if the increased number of the more highly educated Doctors made up for the deficiency in that of the *Officiers*. This is, however, not the case; and he is disposed to look to the operation of more general causes—viz., the suffering condition of the Profession, the difficulties which surround the young man on starting in life, the little compensation which the Practitioner receives for his time spent and other sacrifices, the little protection he meets with in the exercise of his art, and the illegal competition he is subjected to on the part of the unqualified,—motives surely sufficient to deter families and their sons from thinking of a profession so thankless and so ill-remunerated.

As we stated some time ago, Dr. Morton had applied for the renewal of the patent for the exclusive employment of ether in the induction of anæsthesia, granted to himself and Dr. Jackson fourteen years ago, and which expired in November, 1860. Dr. Morton's partner, Dr. Jackson, remonstrating against such renewal, it has been refused by the Patent Commissioner. It seems that Dr. Morton is reduced to a state of great poverty, which he alleges is due to the attempts to introduce ether to the notice of the Profession and the public. If this prove true on investigation, it behoves the public of his own and other countries to see that his share in the discovery—for it was only a share—be liberally acknowledged and rewarded. He has, however, to some extent, divorced himself from the sympathies of the Profession by obtaining a patent in the first instance; and it remains to be shown how far his present destitution may not be due to the attempts made, and the expenses incurred, in working this exclusive right. Many will think that as he has chosen the commercial aspect of the matter he has waived his claims to Professional sympathy.

At the International Statistical Congress held in London, Dr. Jarvis, a delegate from Massachusetts, stated that the custom of wet-nursing was almost unknown in America. This statement has had considerable weight in the subsequent discussions which have taken place upon the subject; but it now turns out that it is very far from being founded on fact. The editor of the *American Medical Times* says, as far as New York is concerned, wet-nursing is a very prevalent practice, and that the demand for wet-nurses is in excess of the supply. He adds the following sensible observations:—

"The practice of employing wet-nurses, therefore, cannot but be considered as an evil, and one which is doubtless destined to increase in the ratio of our increase in wealth and luxury. What is the remedy? The entire responsibility of resisting its progress rests with the Medical Profession. We should endeavour to remove the causes of the evil by inducing mothers to rear their own children. The arguments which may be employed are too strong to be resisted, if kindly, conscientiously, and firmly presented by the Medical attendant. If this duty were thoroughly discharged in every instance, the system of wet-nursing would at once fall into disrepute. In the comparatively few cases where the mother is absolutely disqualified, it is still a question if artificial lactation, in the hands of a competent nurse, may not be preferable to wet-nursing. But, admitting that the wet-nurse must be obtained, the Physician is still the adviser, and has it in his power to make the selection. And here occurs an important duty, which is almost invariably overlooked—viz. if the wet-nurse has a child of her own, it is liable to be put aside without a care or even a thought on the part of the employer. The Physician should remember that in providing a nurse for his patient he is not less responsible for the life of the helpless being which is set aside, and should insist that it be properly provided for."

Mr. Du Chaillou, a citizen of New York, who has for the first time explored a great mountainous and densely-wooded region of Western Africa, lying immediately to the North and South of the Equator, brought the results of his researches bofore the Royal Geographical Society on February 25. This district seems to have hitherto escaped exploration, because it is destitute of the herds of game and natural supplies which abound in the other parts of Africa. The horse, the ox, and the ass are unknown, and these spacious rocky lands are chiefly occupied by a number of the largest apes, a great variety of birds, and here and there by tribes of negroes, some of whom though of large stature, adepts in blacksmithery and the manufacture of spears, are very low indeed in the scale of civilisation, cannibalism being common among them, and women being employed as beasts of burden. Mr. Du Chaillou shot twenty-two specimens of the gigantic gorilla ape, and exhibited at the meeting a group of stuffed specimens of those animals, and drawings representing the house-building ape.

We have read with much satisfaction a report of a public meeting, held at Prestonpans, of the friends of the late Thomas Alexander, C.B., Director-General of the Medical Department of the British Army, "for the purpose of taking steps to commemorate in his native place the valuable services which he rendered to his country and the British army, and also expressive of the high estimation entertained of his personal character." In the following extract of a letter from Mr. Fergusson the case is well put:—

"The memory of such men should always be held especially dear, for, besides the respect thus deservedly shown, there can be no better inducement held out to the rising youth of the day that the path to honour, glory, and worldly success is open to all who will diligently and dutifully aspire, and that industry and gentlemanly bearing may be crowned by all that our earthly thoughts associate with success. It was the inscrutable will of Providence that he should be taken from us at the beginning of a new sphere of usefulness. We may repine, but cannot call him back. We certainly would have honoured him had he lived; let us do what we can for his memory."

Mr. J. F. Hislop, who moved the first resolution, gave several interesting particulars of Mr. Alexander's career:—

"Looking back on the long period of twenty-five years during which Mr. Alexander discharged the executive duties of his Profession, we find evident from the first that primary and essential qualification—a constant regard to the well-being and health of the soldier. While in service during the Kaffir War in 1851-3, we find him introducing gardens for the men, properly-ventilated huts, and a regular system of sanitary inspection; for which he was thanked in orders—a distinction which was earned by his conduct in peace as well as war. An incident showed with what humane promptitude he undertook the heaviest responsibilities for the purpose of securing relief to his suffering patients. Pestilence appeared in his division, and men were sinking, with neither medicine nor

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proper food at hand. He, as its Superintending Surgeon, called the regimental officers around him, and addressed them thus:—'Gentlemen,' said he, 'you are to purchase, on my authority, at any cost, everything necessary for your sick that you can lay your hands on. You are to pour gold down your soldiers' throats if it will save their lives; and if the country will not allow the charge I will pay for it myself.' Neither could the fire of the enemy, nor the many dangers and hardships of the battle-field, for one moment turn him aside from the calm, resolute, yet kindly discharge of professional duty. Again: the testimony of another eye-witness during the scene of the terrible explosion at Inkermann, November 13, 1855, is as follows:—The Surgeons displayed the greatest courage and kindness, and every man was at his post in the midst of fire and shell. Surgeons Alexander, Mure, Natt, Mouat, and Longmore, particularly distinguished themselves, and the first mentioned (Mr. Alexander) brought up the ambulances to the spot while shell were bursting in all directions. Indeed, it was remarked of him that 'At Inkermann, for hour after hour, day after day, he toiled through scenes which those who have not witnessed a battle-field, and the terrors of the Hospital-tent, can neither imagine nor conceive, upheld by the noblest sense of duty; and many men now alive can bear witness to the heroic calm and skill which saved life and limb for them, and the prodigality and care he bestowed on others, regardless of everything but his sacred duties.'"

Such a man deserves a monument; and we trust that the Committee will be liberally supported.

A question of public interest to the Profession is so disguised in the Army Estimates that it is not likely to attract the notice it merits unless the attention of our readers is called to it. It seems that about sixty Army Medical Officers are to be reduced to half-pay,—in other words, will cease to be employed. One Assistant-Surgeon, of the two at present employed, is to be taken from every regiment, sent adrift upon the world on half-pay, or otherwise disposed of. The extraordinary thing about this is, that while the establishment is being curtailed in one direction, it seems to be added to in another; for while Assistant-Surgeons are being discharged in one direction, embryotic Assistant-Surgeons, in the shape of Medical candidates, are being sent to the Military Medical School at Chatham. Now, it is well known that Medical Officers returning from abroad sick and otherwise unfit for duty, have the greatest difficulty in procuring leave of absence to recruit their health,—many are even not able to obtain one week's leave, *because*, it is alleged, there are at *present* not hands enough to meet the demands of the service. Even Medical Officers who go before Examining Boards, and are so ill as to be absolutely unfit for duty, may obtain a limited leave, with the alternative of being obliged to resign their regiments, or, if on the staff, of going on half-pay, if they are not fit for duty within the period of limited leave granted to them. Now, such is not the usage which the military officer receives. With him the case is wholly different. Many examples may be quoted of a Medical and militant officer coming home in the same ship, equally unfit for further duty; the militant officer may obtain successive grants of leave, extending to two years and upwards, while the Medical Officer, after two months, is probably removed from his regiment if still unfit for duty. In his evidence before the Royal Commission, the late Director-General strongly urged that "a fair proportion of leave should be given to sick Medical Officers for the recovery of their health," and the Royal Commissioners not only endorsed his sentiments, but recommended, in their report, that leave of absence should be granted to a proportion even of Medical Officers in health, for the purpose of attending Hospitals and Medical Schools. This latter recommendation has never been followed out in any instance, on account of the want of hands, and yet a further reduction is now chalked out by the Army Estimates. In other departments threatened reduction may have been warded off by political pressure, which we Medical men have rarely any opportunities of exerting. Another hardship, which is not quite visible at first sight, and is not considered by the authorities in reducing men from regiments in which they may have been placed quite apart from any choice of their own, is, that on joining the regiment a Junior Assistant-Surgeon is compelled to pay 25*l.* to the regimental mess and band funds. Now, on being removed by reduction, no part of this money is returned to him, nor does he derive in any way any return for the expense he has been obliged to incur. He is even fined 30s. on the stamp he pays for his commission to the regiment as a Queen's officer. Hitherto, a commission has been considered a sacred document, and it has been the custom not to remove any one holding a regimental commission unless the holder has been tried by court-martial or been allowed to retire at his own request. But of late examples are becoming more and more frequent of Medical Officers being removed, especially on account of ill-health, without any consideration whatever of the money which has been drawn from them; and on the contemplated reduction being carried out, this iniquitous usage, regardless of common equity between man and man, will be perpetrated on a still more extended scale. When an injustice was threatened to the Royal Artillery the other day, by the attempt to introduce officers irregularly into their service, such a pressure was brought to bear on the authorities that the attempt was frustrated, and the Minister for War acknowledged in the House of Lords that it was an error. Will any such influence be exercised to avert the threatened injustice to the Medical Officers of the Army?

We are glad to see that the Staffordshire innkeeper who sued Mr. Walker, of Hanley, last January, for damages for alleged unskilful treatment of a fractured leg, and lost his cause, has been condemned by the County Court to pay Mr. Walker 15*l.* 19s. 6d. for attendance and medicine. Medical witnesses proved that the treatment was sound and the charges moderate; while the innkeeper had no testimony but his own to support the charge of neglect and want of skill. We quite agree with the Judge, who said "He entirely concurred in the verdict, and he considered the defence to the action as discreditable to the defendant as was his conduct in bringing the previous action against Mr. Walker."

The National Medical Registration Association, of which Mr. Lavie, Mr. Hogg, and Dr. Hillier are active members, has prepared the following Memorial to the General Council of Medical Education:—

"To the General Council of Medical Education and Registration of the United Kingdom.

"The Memorial of the undersigned legally-qualified and duly registered Medical Practitioners of the United Kingdom respectfully sheweth,—

"That the Medical Act, so far as it was intended to protect the Medical Profession and the public from the improper assumption of Medical Titles, and the practice of Medicine and Surgery by unqualified persons, has failed to effect the objects for which it was passed.

"That no protection whatever is afforded by the 40th clause of the said Act against the assumption of Medical titles by unqualified persons, because so long as a Medical title, taken however wilfully or falsely, is used without the addition of words implying that such persons are registered under the Medical Act, or without making mention of the licensing body through which such titles are pretended to have been derived, no offence within the meaning of the Act is committed.

"Your Memorialists, therefore, pray the General Council that they will apply to Parliament to amend the Medical Act.

"That, by such amended Act, the defects, more particularly of the 40th clause of the said Act, may be obviated,

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whereby the Medical Profession and the public may obtain that fair protection and immunity from the practices of impostors which, on the passing of the Medical Act, it was the intention of the Legislature to secure."

We trust that the Profession will at once act upon the advice we offered last week, and send petitions to Parliament from every constituency against the unjust taxation of Professional incomes. The example has been set, for we see that Sir F. Smith presented a petition last Monday from the South-Eastern Branch of the British Medical Association, praying for such a re-adjustment of the income-tax as will establish a distinction in the rate to be paid on precarious and permanent incomes.

At the Winchester Assizes, a man named Hooker, who kept a herb-shop, and two women, his accomplices, were convicted of having procured abortion in a young *married* woman named Woodward. The male prisoner charged 20s., half down, the remainder when the affair was over, and used an instrument, and, further, said that he had been in this sort of practice for sixteen years. Mr. Justice Willes sentenced him to seven years' penal servitude; the women to six months' imprisonment each. In another case at Leicester the same offence was committed, the sufferer also being a *married* woman, and a verdict of WILFUL MURDER has been returned.

Extensive seizures of "dropsical" and decomposed meat have been made at Wolverhampton, under the Nuisances Removal and Public Health Acts. The magistrates inflicted heavy penalties. The quantity of meat was large, and several butchers were implicated.

Messrs. Gilbey, in their "Wine Circular," state that:—

"The tastes of even the labouring classes may be converted, and that an English contractor who sent out some hundreds of workmen to France to make one of the railways, could not induce them to work there without a promise that they should be provided with beer from England. A contract was entered into to have it regularly sent out, but in a very short time they acquired the taste of the wines of the country, which were cheaper, and found that in wine they got more for their money. Even in our country, it would be as difficult to persuade the labourer in some parts of the West of England that beer is preferable to good cyder, as it would be to convince the industrious population of the North that cyder is drinkable at any price. Much good wine will now be able to be retailed for twopence, that can be made up to more than a pint with water, and will yet be as strong, or even stronger, and certainly much better than inferior beer. Wine may, therefore, yet become the poor man's drink."

Many of us are familiar with the *New Moon*, the monthly periodical written and edited by the inmates of the Royal Crichton Institution, Dumfries. A new contribution to the literature of the insane has appeared, in the form of the *York Star*, a literary journal set up by the inmates of the Asylum at Bortham, York. To call it a curiosity merely, is to do it an injustice; it is a very amusing little journal, and a paper on "Whist" is written by some one who is quite at home in the game.

A shocking case has been tried at Winchester, in which Henry Lacey, an elderly man, was found guilty of manslaughter for killing his wife, a woman 70 years of age, and bedridden from debility. The prisoner kicked her out of bed, and beat her to death in a fit of drunken fury. He was sentenced to six years' penal servitude.

REVIEWS.

Course of Lectures on the Physiology and Pathology of the Central Nervous System. Delivered at the Royal College of Surgeons of England in May 1858, by C. E. BROWN-SEQUARD, M.D., F.R.S., etc. 8vo. Pp. 276. London: 1860.

AT the time we write Dr. Brown-Séquard is in the act of delivering the Gulstonian Lectures at the Royal College of Physicians. Among the results of the recent changes in that ancient corporation there is none more satisfactory than the enrolment of this distinguished Physiologist and Pathologist among its Fellows,—a proceeding which enables it to do itself the additional honour of following the example set by its sister College, and of calling Dr. Brown-Séquard to the Lecture-table, to point out those applications to practical Medicine of which his Physiological researches are capable. No one who has attended these recent lectures but will rejoice at the publication of the volume at the head of this notice. The book purports to consist of the Lectures delivered in 1858 at the Royal College of Surgeons. But Dr. Brown-Séquard presents us with much more than this, for the six lectures delivered are expanded to twelve by the introduction of "details concerning experiments and pathological cases, which for the sake of brevity he was obliged to omit while lecturing." Besides this, there is an Appendix, by no means the least valuable portion of the book, in which he examines the objections which might be made against many of his views, brings forward additional proofs of some of them, and points out their application in certain instances to the treatment of disease. From henceforth let no one contemn Physiological research as barren of practical fruit. If it has ever been so hitherto the reason must be sought either in the superficial nature of the inquiry, its misdirection, in the assumption of generally admitted doctrines as actual truths which may form an element in our comparisons and judgments or in a defect of that observing faculty which regards no fact as too trivial for remark, too insignificant to have its place in the temple of Science.

Whoever has been hasty, certainly Dr. Brown-Séquard has not. Step by step, patiently and laboriously, has he advanced in the task to which he has devoted his life. During the twenty years preceeding the delivery of these lectures he tells us that he has devoted all the time he could to the questions discussed in them. The following sentences from his preface are worthy of the pen of the scientific investigator, with whom modesty is not only the offspring of research but its parent also. He says:—"If I have not succeeded in my endeavours I can at least have this consolation, that it is not because I have proceeded hastily. But however prolonged my researches have been, I am afraid I must have come to erroneous conclusions on several points, because the questions discussed in these lectures are as difficult as they are important and also because many of these questions are quite new, and I had not therefore the views of other authors to guide me in their examination. I will be thankful to any one who will show me on what points I have erred."—(Preface.)

First of all, however, we must sit at the feet of our Gamaliel. And this we can only do for ourselves. Our readers must really study these Lectures each for himself; all we can do here is to direct attention to one or two points which occur to us as unusually interesting. One of these is treated of in the Tenth Lecture, namely, the "Influence of the Nervous System upon Nutrition and Secretion." Reflex changes in nutrition, as a cause of disease, find their most ready illustration, according to our author, in the instance of the eye. "1st. When the supra orbitalis nerve has been crushed or injured in such a way that it remains irritated, an inflammation or some other affection of the corresponding eye supervenes, which is cured either by the means that diminish the irritation of the injured nerve, or by its section between the nervous centre and the injured part so as to prevent reflex action starting from this irritated part. 2nd. When the eye is the seat of a violent inflammation, and particularly if it be of traumatic origin, it is not rare for the other eye to become affected, and the successful treatment for the affection of this last eye consists in preventing, by various means, the irritation from the first one reaching the nervous centre, by which a reflex action is operated upon the secondarily attacked eye."

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—P. 156. . . . "Even a cataract may be produced in a healthy eye by a nervous reflex influence, either from some part of the trigeminal nerve on the same side, or from the other eye."—P. 158.

In a second series of examples Dr. Brown-Séquard mentions sudden stoppage of the movements of the heart from irritation of some peripheric parts of the nervous system, as where sudden death occurs from drinking very cold water on a warm day, from a blow on the abdomen, sudden perforation of the stomach or intestine, etc. He adds, "I must point out *apropos* of the stopping of the heart's action by a reflex mechanism, that one of the means employed to restore life in asphyxiated children—which consists in the alternative dipping of the body in warm and cold water—is a most dangerous one. No doubt that it is a powerful means of producing reflex action as long as any reflex power remains in the cerebro-spinal axis; but in this very thing lies the danger. I have seen puppies asphyxiated, and having no more respiration, while the heart was still beating fifteen or twenty times in a minute, killed at once on being dipped into cold water, the heart stopping by a reflex action. I do not intend to say that such a means ought not to be employed; I wish only to point out the chance of a sudden arrest of the heart's action, so that Practitioners may be on the watch respecting this accident."—P. 169.

The lecturer proceeds to other examples of the reflex influence of the nervous system upon nutrition, discussing the occurrence of "inflammation by a reflex action;" "muscular atrophy by a reflex action," "paralysis and anæsthesia by a reflex action," and "morbid changes in the nutrition of the brain, of the spinal cord, and of the senses produced by an irritation of some centripetal nerve."

How may reflex action produce or stop a secretion, how produce an hypertrophy or an atrophy? The answer to this question involves an extension of the theory of reflex action far beyond what was contemplated by Marshal Hall and his immediate followers. It involves the physiology of the *vasa nervorum* and of the *nervi vasorum*. This department of physiology and pathology is peculiarly our author's. We cannot pretend to follow him throughout his argument. Here is an example of what may occur:—"Suppose a worm in the bowels, irritating their centripetal nerve fibre; the irritation is propagated to the spinal cord, which *reflects* it upon the cervical sympathetic nerve, by which it reaches the blood-vessels of the retina, produces their contraction, and as a consequence of this cause of diminution in the amount of blood, an amaurosis. If, instead of the reflex action on the blood-vessels, there is an action on the tissues, as in the case of the experiments of Czermak and Professor Bernard, the blood-vessels dilate, and more blood passes through them."—P. 173.

Another valuable result of Dr. Brown-Séquard's researches is an improved theory of epilepsy, certainly more rational, and more in accordance with the known sequence of events in a paroxysm of that disease, than any previously propounded. Here, too, we find reflex contraction of the blood-vessels occupying a prominent position. We cannot refrain from transferring to our pages the following table, showing the series of causes and effects in a complete seizure:—

Causes.	*Effects.*
1. Excitation of certain parts of the excito-motory side of the nervous centre.	1. Contraction of blood-vessels of the brain proper and of the face, spasm of some muscles of the eye and face.
2. Contraction of the blood-vessels of the brain proper.	2. Loss of consciousness, and accumulation of blood in the base of the encephalon.
3. Extension of the first excitation, *partly* due to the accumulation of blood in the base of the encephalon.	3. Tonic contraction of the laryngeal, the cervical, and the thoracic expiratory muscles (*laryngismus* and *trachelismus*).
4. Contraction of laryngeal and of thoracic expiratory muscles.	4. Crying and stoppage of respiration.
5. Further extension of the first excitation of the nervous centre.	5. Tonic contraction, extending to most of the muscles of the trunk and limbs.
6. Loss of consciousness, and tonic contraction of the trunk and limbs.	6. Falling.
7. Laryngismus and trachelismus and the fixed state of the chest.	7. Asphyxia, with obstacles to the return of the venous blood from the head and the spinal cavity.
8. Asphyxia and the accumulation of black blood in the encephalon and in the spinal cord.	8. *Clonic convulsions* everywhere; contraction of the bowels, the bladder, the uterus; erection; increase of many secretions; efforts at inspiration.
9. Exhaustion of nervous force generally, and of the reflex faculty especially, except for respiration, which gradually becomes normal.	9. Cessation of the convulsions; coma or heavy sleep, after which extreme fatigue and headache.

P. 184.

With this extract we must conclude. The little we have said will satisfy our readers of the immense store-house of sound theory and practical suggestions which these Lectures constitute.

A Manual of Elementary Chemistry, Theoretical and Practical. By George Fownes, F.R.S. Eighth Edition. 8vo. Pp. 771. London: 1861.

Dr. Bence Jones and Dr. Hoffmann, the Editors of this Eighth Edition of Fownes's standard Manual, have corrected and revised it throughout, and have given in an Appendix the substance of Gerhardt's views on Chemical Notation, and a synoptical classification of the more important groups of chemical substances founded on the new system. A short account is also given of Kirchhoff and Bunsen's method of Spectrum Analysis, so that every addition has been made which the progress of Chemistry has made requisite up to the date of publication.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

ON HERPES ZOSTER.

By Dr. BIERBAUM.

Dr. Bierbaum observes that it is a matter of surprise that a Physician of such extensive practice as J. P. Frank only met with four cases of herpes zoster. This may certainly be accidental, for sometimes a long period passes without a case occurring, although the disease is not of that rare occurrence which it has been represented to be. One thing remarkable is the little notice which has been taken of it by writers on diseases of children. In his own note book the author finds the particulars of ten cases, without being at all sure that these are all which he has met with. From these he has drawn up the following sketch of the affection.

It may be divided into two forms accordingly as it is or is not accompanied by fever, the latter being of the most frequent occurrence, but the fever may be so slight as scarcely to excite attention. As a general rule, though not always, it disappears on the outbreak of the eruption. The parts of the body where the eruption is to have its seat are generally affected with itching, prickling, or burning sensations. Sometimes as soon as twenty-four hours afterwards vesicles may become developed in groups, filled first with transparent and then with turbid fluid, and surrounded by dark red and more or less extensive circles. The intervening skin generally remains unaffected, but in severe cases the whole surface from the sternum or the linea alba to the spine may be of a dark red. The name is scarcely accurate, as, except in very rare cases, the eruption only implicates one-half of the body. In the author's ten cases the disease appeared seven times on the right side of the body, once on the abdomen, and six times on the chest; and three times on the left side, once on the chest, and twice on the abdomen. He did not observe the symptoms vary according to the site of the eruption, as mentioned by some authors, such as vomiting, colics, dry cough, etc. The affection has been observed on the arms and neck, but not in the face or legs. The ages of the author's patients were 6, 8, 9, 14, 16, 18, 50, 60, and 70, six of the number being males and four females, and the majority being in a good state of

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health. Of nine of the cases, six occurred at the cold and three at the warm time of the year, zoster of the chest being of more frequent occurrence in the winter and that of the abdomen in the summer. The affection goes on to a natural cure, the most troublesome circumstance being the burning pain, which irritates the patient and prevents his rest, and in most cases confinement is not even requisite. Still sometimes this favourable course is not observed, as occasionally great local inflammation is present, and the patient may have to be confined to bed for weeks. When the affection is accompanied by fever, saline laxatives may be prescribed; and when the pain is severe, pulv. ipecac. comp. is useful. Locally we may use poppy oil for assuaging the burning pains. Everything which can disturb the course of the eruption should be avoided, such as opening the vesicles, which will only give rise to ulcerations. These may arise, indeed, without any injury having been done to the vesicles, but they are soon healed by means of zinc ointment.—*Journal für Kinderkrankheiten*, Vol. xxxv. pp. 96—108.

EXCERPTA MINORA.

Enormous Hydrocephalic Head.—Dr. Gardner exhibited a child to the New York Academy, 3 years old, the subject of hydrocephalus, but in the enjoyment of fair bodily health, and of sufficient intellect to enable his being amused with toys. The horizontal diameter of the head measured 32 inches; from the tip of one ear to that of the other, measured 23 inches; and from the os frontis at the junction of the nasal bones to the base of the occipital, 37½ inches. In the year 1857 a child, aged 9 years, had also been exhibited, whose head measured horizontally 32 inches; from the root of the nose to the occiput, 25 inches; and between the tips of the ears, 21 inches. The present case is the largest head Dr. Gardner has been able to get any account of, excepting one in Meckel's Museum. Dr. Conant had seen in the case of a child, 9 years of age, the horizontal circumference measuring 33½ inches, and between the tips of the ears 24 inches. As to the operation for hydrocephalus, all the members of the Academy who spoke upon the subject had found it of no avail.—*American Medical Times*, No. 4.

Artificial Food For Infants.—Dr. Hauner, as the result of his large experience at the Munich Children's Hospital, comes to the following conclusions:—1. The mother's milk is the only true food for infants. 2. The milk of a healthy nurse is the best substitute. 3. The milk of animals judiciously mixed with tea or water is the best artificial food. 4. The goodness of the milk can only be judged of by experience and the thriving of the child. 5. These also teach us that the milk of cows fed with hay, chaff, and meal in winter, and with green food, clover, etc., in summer, is alone suitable. 6. Milk of animals otherwise fed gives rise to various disturbances of the digestive organs, especially diarrhœa. 7. As in large towns pure milk can be seldom obtained, it is found that a pap made of old baked wheat-flour, and thin rice-water as a drink, better suit children than bad milk. 8. Pap made of any other substance, as rice-flour, arrowroot, or biscuits, is not more useful, and is generally less so. 9. Food formed of a mixture of milk and animal broth often agrees very well with infants some months old, and is usefully employed in feeble sucklings, when they will take it. 10. The chemical and microscopical examination of milk can seldom be resorted to in practice, and it furnishes generally less useful indications concerning its goodness than does experience.—*Journal für Kinderkrankheiten*, Vol. xxxv. p. 147.

Treatment of Placenta Prævia with Copious Hæmorrhage.—Dr. Gaillard Thomas, Professor of Obstetrics at the New York Medical College, sums up a lecture upon this subject with the following synopsis:—1. Os dilatable and woman not exhausted,—deliver immediately by version or forceps. 2. Os dilatable and woman dangerously exhausted,—detach a portion of the placenta, and should this not be sufficient, the entire organ: employ styptics and stimulants. 3. Os rigid and woman not exhausted,—detach the portion of the placenta nearest the cervix, and if necessary apply styptics and the tampon, or the colpeurynter. 4. Os rigid and woman dangerously exhausted,—detach whole or part of the placenta, apply sponge saturated with perchloride of iron, and support by stimuli.—*American Medical Times*, No. 3.

The Royal Saxon Obstetrical School at Leipsig.—Dr. Credé, on the occasion of the fiftieth anniversary of this establishment, states the results of its operations since its foundation in 1810. At the "Stationary Clinic" 5731 deliveries took place, 5245 having ended naturally, and 492 with the assistance of art. Of these 5731 women 109 died. There were 5782 children (2950 males and 2832 females) born, of which number 380 were born dead and 271 died afterwards. The presentations are specified in 5765 instances—viz., cranial, 5551; facial, 26; breech, 71; foot, 70, and cross 47. At the "Polyklinik," or out-door establishment, between 1849 and 1859, 1203 deliveries took place, with 20 twin-births. Of 1217 new-born infants, 1080 (568 males and 512 females) were viable, and 137 premature. Of these children, 1010 were born living, and 70 were born dead. Of the 1203 labours, 891 were completed naturally, and 312 with assistance (the forceps was applied 188 times (!), and turning was resorted to 55 times).—*Monatsschrift für Geburtskunde*, Vol. xv. p. 191.

Soap from Yelk of Egg.—M. Maury, a pharmacien of Valence, in Dauphiny, has introduced into commerce with considerable success a soap made from yelk of egg, which is spoken highly of, its price being the only objection to its general use. There have been already 10,000 kilogrammes disposed of. This soap is of a yellow colour and firm consistence, having an odour by no means disagreeable. It dissolves readily in any ordinary water, and cleans as well as the best Marseilles soap.—*Moniteur des Sciences*, No. 17.

FOREIGN CORRESPONDENCE.

PRUSSIA.

Bonn, February 27, 1861.

According to my promise, I to-day send you a short account of the Professional career of the lately deceased Dr. De Leuw, who in England was honoured with the name of the "Prussian Oculist." It is certainly flattering if a countryman acquire fame abroad; but Germany is happily well supplied with Physicians and Surgeons of far superior talent and acquirements than the one just mentioned possessed, if, indeed, it is possible to draw a parallel between him and scientifically-educated Medical Practitioners. De Leuw was originally "a Surgeon of the second class," a strange remnant of olden times. As is the case with the English dressers, these Surgeons were men who had not received a liberal education, and did their work by the direction of the Physicians, who thought it beneath their dignity to touch a lancet or a knife. Surgery is now at least on the same level with Medicine, and has certainly the advantage of not being trammelled and infested by nebulous ideas and theories; but in Germany, as everywhere else, Surgery has proceeded from the barber-shops, and has only slowly divested itself of the character of trade. "Surgeons of the second class" no longer exist in Prussia, where now a thorough surgical and obstetrical proficiency is required of every Medical Practitioner; and in this respect Prussia is certainly far ahead of many other countries. But, at the time of the great war with France, a virtue was made of necessity, and a great number of men who were only capable of performing the smaller surgical operations, were enrolled as Army-Surgeons, and also received a licence to practise Medicine. At the close of the war, in 1815, it would have been unjust to recall the licence, and they were thus allowed to continue the practice of Medicine, at least in such places where there were no regularly-qualified Physicians. This was the case with De Leuw, who had been educated at a School of Surgery which then existed at Düsseldorf, and at the head of which were Professors Joseph Naegele, a clever oculist, and brother of the famous gynæcologist of Heidelberg, and Dr. Reybald. De Leuw practised as Army-Surgeon during the French war; he afterwards settled in the small village of Graefrath, near Solingen, where he soon acquired a good reputation as oculist.

It seems that a correct view of the so-called Egyptian ophthalmia, which was then very prevalent among the armies, and had from them spread to the general population, went far to render him favourably known. His only contribution to Medical literature is a book on this disease, which was published in 1824, and gives a favourable impression of the practical talent of the author. It certainly

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shows that he was a good observer; and since in Ophthalmic Surgery an accurate diagnosis of the disease is more than half the battle won, we cannot wonder that he met with great success in his treatment. How often even at the present day are granulations of the conjunctiva, as the cause of many cases of inflammation of the cornea, overlooked, and patients are treated for years with all sorts of collyria, before the Surgeon is struck by the idea to just turn up the eyelids, where the seat of the disease is to be found. Many oculists owe their reputation to the circumstance that a patient comes to them who has for years been unsuccessfully treated, because no correct diagnosis was made, and who, of course, rapidly improves as soon as the remedies are applied to the proper place. We have also reason to believe that De Leuw in a former period of his life was possessed of no inconsiderable skill as an operator. It is true that he exclusively had recourse to reclination; but he certainly practised it with great dexterity. On the other hand his prescriptions were exceedingly funny. He gave every day a different collyrium, and the strangest combinations of herbs were brought to bear upon the disease. The flowers of *melilotum*, the *summitates malvæ*, oak-leaves, the *semen papaveris*, and dozens of others play an important part in his eye-waters. A whole series of spirituous tinctures for washing, and the most curious plasters and ointments were also alternately used; at the same time abominable mixtures, the utility of which cannot possibly be imagined, were prescribed for internal use, and more especially in cases of incipient cataract, the hopes of the patient were kept alive by a fresh mixture every day, until the operation gave the finishing stroke to the disease. Purpose or critical selection are not to be observed in his prescriptions, some of which fill several pages; and evil tongues would have it that the Apothecary was a confederate of the Doctor. In the meantime the business flourished; in Graefrath one inn was built after the other, and as every patient had a special attendant given to him, it is easily to be conceived that the prosperity of the place entirely depended upon the "Wonderful Doctor." The ruder he was in his manner towards his patients, the more his advice was sought after. A sad fate refused the old man the gratification of his principal wish, viz. that his only son should succeed him in his practice. This young man was well educated, and possessed considerable talent, but dissensions grew up between the two, and at last the son preceded his father to the grave. De Leuw had procured himself a diploma at Giessen in the well-known fashion; and although this was not legally recognised, the Prussian authorities closed their eyes, in consideration of the benefits he had conferred upon the place. A grateful patient in high life—one of our infinitesimal princes—honoured him with the title of Hofrath (Aulic Councillor), and he thus attained the summit of his glory, which, however, for the last twenty years, was entirely limited to foreign countries. The new development of Ophthalmic Surgery, which has been attended by so highly important practical results, was not at all to the taste of old De Leuw, who never paid any attention to it; we cannot, therefore, think that we have suffered any severe loss by his death.

Bonn, the western stronghold of German science and intellect, has, by its Ophthalmiatric Clinic, acquired a well-founded reputation in Ophthalmic Surgery. This University was founded after the great war with France, in 1816, in pursuance of the view that Prussia's strength does not only consist in force of arms, but more especially in intellect and knowledge. The first Ophthalmic Surgeon who was appointed here was Philippus von Walter, an excellent operator, but less eminent as a teacher. To him succeeded Professor Wutzer, who, after having restored the sight to a very large number of patients, became himself affected with cataract in old age. He was far-famed as a teacher, and his clinic was frequented by students from all parts of Europe and America. Wutzer's successor is Professor Busch, a pupil of Dieffenbach's and Langenbeck's: he is Lecturer on Clinical Surgery and Surgeon to the University Hospital and to the Catholic Hospital. Professor C. O. Weber, a pupil of Sichel's and Wutzer's, and for many years Assistant-Surgeon to the University Hospital, gives lectures on Ophthalmology at this University, and is Surgeon to the Evangelical Hospital. In Cologne, Ophthalmic Surgery is represented by Dr. Fischer, also a pupil of Wutzer's, and who is Surgeon to the large Town Hospital, which, unfortunately, has no School of Medicine attached to it, and pretty much resembles a close and inaccessible borough. The Assistant-Surgeon there is the son of the late physiologist, Johannes Müller. Quite recently a pupil of A. Von Graefe's, Dr. Moorem, at Oest, near Aix-la-Chapelle, has acquired a well-deserved reputation as an Ophthalmic Surgeon. Thus, there is no reason to regret De Leuw's death so very much as it is perhaps done in England; although we must say that we have always wondered why people came so far to consult a man such as De Leuw, when they could have the advice of men of the stamp of Mr. Bowman and Mr. Dixon so much nearer home. But "*omne ignotum pro magnifico.*" It is more probable that the place where De Leuw has resided for so many years will feel his loss, by the absence of wealthy English patients, who will no longer be attracted to it, and for innkeepers, attendants, and the Apothecary there, a very gloomy prognosis indeed seems to be justified.

Dr. De Leuw's career is another proof that in Germany, as well as in all other countries, there is a class of Doctors who enjoy a widely-spread reputation, without its being easy to discover why it should be so. Perhaps there is no sphere of human knowledge in which the general public assume to themselves a greater right of having an opinion of their own, than Medicine: health and disease are of such immediate personal interest to men that, trusting to their own perceptions of what agrees and disagrees with them, they consider themselves as much or even more competent to judge for themselves than Medical men who have made the subject a life-long study. The fact that a thorough insight into morbid processes is only possible to such as have an intimate knowledge of the healthy conditions of the body and its functions, that is to say of anatomy and physiology, and of those changes which pathological anatomy teaches us do take place in the system, seems still at the present moment to be so foreign, even to many Medical men, that we can scarcely find fault with the public if they do not appreciate scientific Medicine and care little about the way in which they are treated, or rather maltreated. They think there must be some remedy, whatever it may be; and if a man confidently asserts that he has a cure for every symptom, he is certain to find many believers, as the symptom is generally considered to be the disease itself. We cannot, therefore, wonder that the most absurd of all systems, viz. homœopathy, has so quickly found a home everywhere. It accommodates itself to public prejudices, nay, it even panders to the erroneous view that the symptom is the disease, and then propounds the theory of infinitesimal dilution, which is pathetically repeated at the corner of every street. At the same time we must confess that if we see at the present moment spirit-rapping, table-turning, animal magnetism, (practised by "strong" mediums,) carried on with the greatest earnestness in the highest circles of society—in Rhenish Prussia especially, by a beautiful and highly-gifted mediatised princess—we cannot wonder if other seemingly less ridiculous quackeries should be easily swallowed by persons in a more humble sphere of life.

In Bonn, charlatanism is just as rife as it is in Brighton; and if you are blessed with cobblers who make ten thousand pounds a-year by plastering and kneading their patients, we, on the other hand, can boast of shepherds and old women who make a scarcely less number of thalers by just as ingenious practices. The nostrums are, of course, always composed of the commonest things; but as they are concocted by the quacks themselves, it is not known what they contain.

On the Kreutzberg, from the top of which the finest view of the seven mountains and the valley of the Rhine is to be had, there lived recently an old shepherd who had had a most extensive practice for many years. He was consulted in a somewhat anomalous fashion,—samples of urine, accompanied with handsome fees, being sent to him for inspection from far and near, and he, in return, sent herbs for the cure of every ill that flesh is heir to. There is also a little spot near Godesberg, where a short time ago little more than a few dung-heaps were to be seen, and now a whole village has sprung into existence, solely in consequence of the remedial powers ascribed to an old woman, called the "Schweinheimer Frau" (literally, the woman of the pigs' home), who has amassed a nice little fortune by the inspection of urine. Her sons-in-law have built several inns, in which the patients who come to consult the woman are received, and are confirmed in their confidence in the curative powers of the old

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witch by the wonderful tales of their hosts. If you remember that almost the entire population of the Rhenish provinces of Prussia are Roman Catholics, you will not be astonished that we have also much superstition here. Thus, every year, on the Feast-day of the holy Apollonia, crowds of peasants throng to the cathedral of Bonn, to seek relief of the tooth-ache through the intercession of the Saint, the cure of this ailment being her specialty. Then we have the Holy Virgin of Kevlaar, who has been so well described by Heine in one of his best poems, the beauty of which, however, is scarcely to be perceived in the English translation:—

"The mother of God at Kevlaar,
Her best dress wears to day;
Full much hath she to accomplish,
So great the sick folks' array.

"The sick folks with them are bringing,
As offerings fitting and meet,
Strange limbs of wax all fashion'd,—
Many waxen hands and feet.

"And he who a wax hand offers,
Finds cured in his hand the wound;
And he who a wax foot proffers,
Straight finds his foot grow sound.

"To Kevlaar went many on crutches,
Who now on the tight rope skip;
And many a palsied finger
O'er the viol doth merrily slip."

She receives, in fact, even at the present day, scores of waxen hearts, arms and legs, from the sick, who believe that by such offerings she will be induced to cure their corresponding ailing members of their bodies; and a roaring trade in waxen limbs is driven there.

The quacks in this neighbourhood have generally a mysterious way of speaking and acting, and keep in their pay one or more confederates, or "factotums," as they are called, whose duty it is to work upon the imagination of the patients by tales of wonderful cures; and who are, therefore, of the greatest importance for the success of their employers. To this class belongs a young oculist at Königswinter, who was formerly a student at this University, and is quite devoid of talent, but has recently created much sensation. His factotum is a barber; and a barber in this capacity is well worth his keep; for as the Germans do not themselves shave, but are shaved by the barber, and such a person has consequently access to the closets of the highest dignitaries, he is almost always an influential man, and he is also the chief source from whence the strangers in the hotels derive their information of what is going on in the place. The barber in question is continually talking of a wonderful cure just performed on a Russian Countess, who has come all the way from Toboisk, in Siberia, where her husband is an exile, to consult Dr. So-and-so; or of a French Marquise, who, after having consulted the most eminent oculists in Paris and London, and was given up by them, has come to Königswinter, seen the Doctor, and been cured. The treatment commences with a pair of blue spectacles, which are given to the patient, and in the profits of which the barber is a sharer; secondly, artificial leeches are ordered, which are, of course, much more efficacious than the natural ones, as they are a great deal more expensive; at last, in order to make the process of cure as mysterious as possible, the patient is confined to a dark room for forty hours. As this mode of proceeding is entirely novel, people, of course, consider the Doctor a genius.

It is a curious fact, that almost all our quacks take to small towns and villages, and seldom venture into larger places, such as Bonn and Cologne, where they would soon be put down. Thus one of the chief charlatans in the whole province, a quondam master-turner of the name of Baunscheidt, lives in the small village of Endenich, near Bonn. This fellow has constructed an instrument, to which he has given the grand and highly-significant name of "lebenswecker" (life's awakener). With this he performs a sort of acupuncture, and then rubs into the wound thus made a mixture composed of croton-oil and other oils, and which is called by the people gnat's-oil. By this process he cures everything, unless carbuncle should supervene in consequence and kill the patient, which has not unfrequently been the case. However that may be, Baunscheidt does a flourishing business, and his "lebensweckers" are exported to all parts of the globe. Quite lately a series of advertisements of this new panacea appeared in the *Times* newspaper.

AUSTRIA.

VIENNA, March 1, 1861.

THE Concordat with Rome, and the system of hypocrisy and clerical government inseparably connected with it, has not only produced the most disastrous results in the political administration of this Empire, but it has also extended its baneful influence to almost every branch of social and scientific life. Quite lately very interesting revelations of the terrible abuses which have crept into the administration of the large Wieden Hospital, in this city, have been made; but, unfortunately, the unanimous statements of all the Medical men connected with that Institution, have not been able to induce the authorities to abolish a system of Hospital administration which is most prejudicial to the real interests of the community. When, some years ago, the Ministerialrath, Herr von Weiss, handed over all prisons and Hospitals in the Empire to the superintendence of spiritual orders, it was confidently asserted by all persons competent to judge, that not only the Medical service, the nursing, and the attendance on the sick, but also the reputation of the spiritual orders, and even the cause of religion itself, would grievously suffer if such a system were carried out. This prediction has been fully verified, as now every voice is raised in indignation against the whole system of spiritual superintendence and administration, which has become insupportable to the nation. However, Herr von Weiss did not heed this warning, nor did he care to what class of persons he confided the management of these Institutions, provided they were, or simulated to be, fanatical devotees. In order to please the clerical party, emoluments were showered upon these orders to an extent unheard of in recent times. Not only were the highest salaries given to those who belonged to them, but they also received money out of the funds of the Institutions under their care whenever they applied for it; nor was it concealed that the Government intended to enrich them at the expense of the nation.

The Wieden Hospital was, in 1859, handed over by the Government to the Sisters of the Order of St. Franciscus of Assissi. Nor must I, in justice, forget to mention that this order is not identical with that of "the Order of the Greys" or the Sisters of Mercy, who are comparatively harmless in this city, although they have made much mischief in other places. The Franciscans are not bound to their order by indissoluble vows, but are allowed to leave it at will, and can be dismissed by the authorities whenever they think proper. They have mostly been taken from the lowest classes, and very many of them had been servants-of-all-work before they were received into the order. The Sisters of Mercy, on the other hand, belong to the better classes of society: they are well educated, and enter the order from religious impulses, or when obliged to do so by their families; while the Franciscan Sisters, employed at the Wieden Hospital, enter it either compelled by distress or in order to avoid the trouble of maintaining themselves by harder work. Devoid of all culture of heart and mind, they are cruel and heartless towards the patients, and exigent, arrogant, and vulgar towards the Medical staff, whom they annoy and abuse in a most extraordinary manner. Their only aim is to amass by all kinds of peculations and misappropriations of the funds of the institution a fortune for themselves; and when they have succeeded in doing this, they retire and make room for others.

As the press was completely gagged and the Government all-powerful, of course no complaints reached the public ear for some time; nor could the Medical men make any open complaints. When Herr von Weiss introduced the Sisters to the management of the Hospitals at Prague, he bluntly told the Medical staff that any one of them who was not satisfied with the new arrangements would immediately be pensioned off; and as most of them are almost entirely dependent upon their places, they did not resign in a body, as would have been the best plan. The same was the case here. It is true, that the Director of the Hospital now and then made remonstrances to the Government; but he either received no answer at all, or was threatened with dismissal if he continued his complaints.

Thus every day the abuses increased. The food became less sufficient, the nursing and attendance worse, the linen dirtier, the lighting more invisible, the behaviour of the

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Sisters more insolent and repulsive, until at last they became so insupportable that further silence would have been a crime, and a rupture was inevitable. The Physicians then laid their complaints before the authorities; but still they would have been laid *ad acta* if the press, which is now beginning to speak out, had not taken up the subject. The following are some of the many grievances complained of. Since the Wieden Hospital has been under the management of the Franciscan Sisters the wards have only been cleaned twice a-year, and even then this was not thorough. The walls were not washed, but merely dusted. A cleansing of doors and windows was never thought of, and ventilation is quite neglected. The diet was sometimes not changed for weeks together, and turnips or oatmeal were given day after day. The food, which was almost uneatable, was generally served cold, the meat was hard and indigestible, the beer undrinkable, and the whole was sometimes so bad that, after having been taken, it was immediately vomited. Besides thus deteriorating the quality of the food supplied to the patients, and pocketing the difference, the Sisters also put down a far greater number of portions in the accounts than had been actually prepared or consumed. When the patients complained of bad food and attendance, they were threatened that, if they did so again, they should be turned out by the police. Any money, watches, or rings which the patients possessed were taken from them on entering the Hospital; nor were they ever returned, unless repeated applications, sometimes for months together, were made for them, and then only when legal proceedings were threatened. Letters to the patients were opened, and frequently not given to them at all. At the same time the Sisters made profits by selling coffee at a high price in the wards. The linen used by the patients was only changed once a week, and the blankets were never washed at all, but merely dried, and they were used in this way until they fell to pieces from sheer rottenness. The excuse made by the Mother-Superioress for this disgusting practice was that such blankets were given back to the same patients who had dirtied them! Oil-cloth was never provided even for such patients as were too debilitated to move in bed, but filthy rags of blankets which had become entirely rotten were employed in its stead. Even in cases where the patients were suffering from dysenteria these rags were only changed once a-day, and these unfortunate creatures were thus obliged to remain for four-and-twenty hours in beds soaked with fæcal matter. The straw palliasses upon which patients died were not removed, but were left for the use of the next comer,—while such a proceeding is not allowed to take place even in field Hospitals in time of war, and when the scarcity of material is often grievously felt. In addition to all these horrors, there was often only one attendant for a large ward, and when there were two, they were constantly quarrelling with each other. In order to be free for the rest of the day, the attendant sisters often shook the patients out of their sleep, and turned them out of their beds at four o'clock in the morning, so that they were often exposed to cold and draught while in a copious perspiration. On Sundays and feast-days,—and of the latter there are not a few in this country,—the beds were never made at all. The temperature in the wards was often extremely low. On one occasion a patient in delirium was left quite unattended and jumped out of the window. On another, a lunatic, who, by the advice of one of the Physicians, was confined in a separate room, was ordered by one of the sisters to return to the general ward, where he remained for some time, to the greatest terror of the other inmates. The male patients were constantly neglected, and the greatest prudery was shown in the attendance on them, especially by such of the Sisters as had afterwards to be dismissed, because it turned out that they belonged to that interesting part of the community which is designated "the social evil." Several times, when a patient was affected by gangrene, and the Surgeon ordered him to be removed to a separate room, in order to prevent the spread of this infectious disorder, the Sisters refused to comply with this request, and Hospital gangrene broke out in consequence. On one occasion it became known that several spare rooms had been lent to priests who did not belong to the Hospital; for what purpose it is difficult to imagine. Some time ago a Medical man who was attached to the Hospital fell ill while visiting the patients, and was taken to a spare room. As he was a Protestant, he was continually told by the attending Sister that she was very sorry for his soul, and that, as he would soon die, he should make haste to embrace the Roman Catholic religion.

Attendance was entirely refused by the Sisters in the following cases: when examinations or operations were made in men who were affected with syphilis, diseases of the genitals, urinary organs, the rectum, wounds on the abdomen, perinæum, inguinal region, and the thighs; also when clysmata, suppositoria, leeches, ointments, or cataplasms, were ordered to these parts. And, what is more extraordinary, they even refused all help in cases of labour, syphilis in females, diseases of the uterus, the bladder, and the urethra; but they now and then kindly consented to hand the Surgeon water and sponges, while they would not touch the catheter. In cases of parturition they went so far as even not to suffer other patients to render any assistance to the parturient women! All these things were not denied by the Mother-Superioress, who justified it by saying that exemption from these services formed part of the agreement and covenant which had been made between the Order and the Government; but inspection of this agreement was refused. At the same time, however, the Medical men declared that the sisters declined to attend in other cases where their delicacy could not be so shocked, and sometimes the Medical men were compelled to nurse and keep the watch throughout the night because the sisters absented themselves. Even towards dying patients the behaviour of the sisters was most heartless; they refused them the most necessary services. Relatives were not allowed to see patients *in articulo mortis*, even if permission to do so had been granted them by the Physicians; while the latter were often told, in the rudest manner, to go out of the wards. To a patient who suffered from fever, and who panted for a fresh draught, this was denied, because she was first to receive the Holy Communion; although the Canonicus of the Hospital afterwards declared that patients might, without impiety, eat and drink before partaking of the Sacrament. And these are the persons whom a celebrated preacher, a short time ago, described as "betrothed to Heaven, and as heavenly beings, who have devotedly sacrificed their lives to suffering humanity"! I must not forget to mention that the rooms which were newly built for the accommodation of the Sisters were so arranged that they almost entirely shut out the light from the Surgical wards, so that the latter seemed to be more fit for store-rooms than anything else; and the access to these wards was rendered difficult and dangerous by a very small and steep staircase leading to them.

During the time that these affairs were under the examination of a Committee instituted by the Government, an animated discussion took place in the public papers, whether the Mother-Superioress had formerly been cook or housekeeper to the Canonicus Holzinger, who is attached to the Hospital. This interesting point was not satisfactorily settled; but it is certain that during the time that the Sisters have had the management of the Hospital (three years and a-half), they have appropriated to themselves no less than 14,000*l.*, which ought to have been spent on the comforts of the patients. The upshot of the inquiry was the following:—The sisters retain the administration of the Hospital, and are only asked to discontinue some of their most violent and injurious practices; while the Medical men, who brought the complaints before the Government, have been severely reprimanded, and recommended to attend to their own business.

AMONG the Bills which have passed the Jamaica House of Assembly, are the Census Bill and a Bill for the appointment of a Commission to enquire into the past and present management of the Public Hospital and Lunatic Asylum of the island. Both these measures have also passed the Legislative Council with trifling amendments, and returned to the Assembly. That they will ultimately become law is therefore certain. The following are the gentlemen appointed on the Commission of Enquiry, under Dr. Bowerbank's Hospital Bill:—The Hon. A. G. Fyfe; the Hon. R. Hamilton, M.D.; the Hon. Alan Ker; Richard O'Flaherty, Esq., M.D., Army Deputy Inspector of Hospitals; and C. R. Kinnear, Esq., M.D., Deputy-Inspector-General of Hospitals and Fleets. The public hail with gladness the appointment of this Commission—the result of the praiseworthy and persevering efforts of Dr. Bowerbank.

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GENERAL CORRESPONDENCE.

A MEDICAL VETERAN.

LETTER FROM DR. C. GUISAN.

[To the Editor of the Medical Times and Gazette.]

SIR,—Allow me to take the liberty of sending to you an example of Medical longevity among our countrymen. Dr. Ricati was born in 1773, passed his examinations in 1797, as the Canton de Vaud was still under the domination of Bern, and died at the end of December, 1860, at Vevey, where he practised during sixty-three years. The last ten years of his life he practised almost only for the poor, with the greatest patience and modesty. He was very successful in the treatment of the diseases of children. He was the oldest Physician of our canton, and the last who graduated under the domination of Bern.

I am, &c.

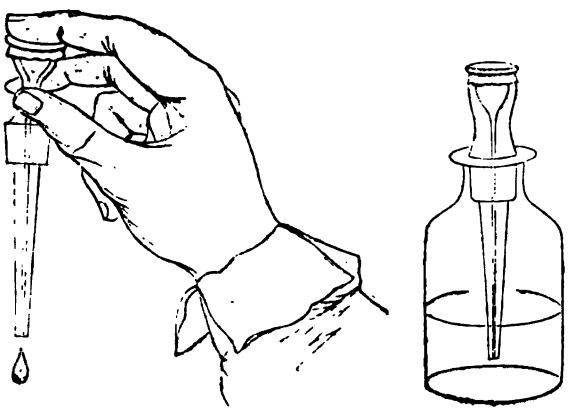
Vevey, February 28. C. GUISAN, M.D.

EYE-DROPS.

LETTER FROM MR. CHALK.

[To the Editor of the Medical Times and Gazette.]

SIR,—Those who are engaged in the treatment of ophthalmic diseases will probably find great convenience in the employment of an apparatus I have devised for dropping solutions into the eye. The subjoined description and the accompanying woodcuts will, I hope, convey a sufficient idea of its construction.



It consists of a capillary tube and bottle. The former is made of a piece of barometer tubing, and is so contrived as to serve the purpose of a ground glass stopper to the bottle, and a neck for the convenience of holding. The upper end of the tube above the neck is expanded into a cup-shaped head with a rim, over which is securely tied a thin piece of vulcanised india-rubber, forming an air-chamber; the lower end is shaped into a smoothly-cut, tapering stem, rounded at its point, so as to avoid any injury to the eye whilst in use. The bottle contains a fluid ounce, and should be kept about three parts filled with the solution, so as to keep the stem of the tube partly immersed therein.

By forcibly depressing the india-rubber covering with the point of the finger, the air is of course expelled from the chamber through the solution, and as the pressure is withdrawn, is replaced by the ascent of a portion of the fluid through the tube to the chamber; this, when filled, contains about fifteen minims by measure.

When dropping the solution into the eye, care should be taken to make gentle and continuous pressure on the india-rubber cap, so as to avoid any access of air to the chamber, otherwise, as it becomes partly empty, an air-bubble is apt to form at the end of the tube, instead of a drop of solution. A very little practice, however, will suffice to show, better than any description I can offer, the readiest means of appliance.

When several bottles are used, they should be placed in a stand with compartments, each one being fixed therein by a brass collar made to take out and in when required.

The advantages of this apparatus over any other that I know of for a like purpose I believe to be the following—viz., simplicity of construction, cleanliness, uniformity in the size of the drop, hermetical closing of the solution by the tube itself when not in use. To the ready and experienced manipulator I need scarcely point out its usefulness for microscopic, chemical, and other purposes.

I am, &c.

WILLIAM OLIVER CHALK.

PATHOLOGY OF FEVER.

LETTER FROM DR. MURCHISON.

[To the Editor of the Medical Times and Gazette.]

SIR,—In a review of Dr. Lyons's work on Fever, which appeared in a recent number of the *Medical Times and Gazette*, the following paragraph occurs:—

"Only one word more, however, before we part with Dr. Lyons. In various parts of his volume we meet with the names of German, French, Irish, and, now and then, Scotch observers; but the names we do *not* find, are those of Stewart, Jenner, Murchison, Parkes, with some others of English notoriety, the accepted regenerators of the Pathology and Nosology of Continued Fever. How is this?"

In a letter which the review in question has elicited from Dr. Lyons, that gentleman gives as a reason for his not having mentioned the names of Jenner and Parkes, the fact of his not having entered in his work on the consideration of the subjects specially elucidated by those able observers The letter concludes as follows:—

"Finally, allow me to remind your reviewer that as we learn from Homer that the siege of Troy was pretty wel advanced before the arrival of Neoptolemus, so the regeneration of the pathology of continued fever can be very readily proved to have been pretty fully accomplished before the (still recent) arrival upon the scene of that author, whose name, with less of modesty or discrimination than might be, is placed before that of Parkes, upon the extemporised bead-roll of immortality which concludes the review."

I have too much respect for Dr. Lyons to believe that he intended to insinuate that I am the author of the review, or that I had the presumption to place my name before that of Dr. Parkes, or, indeed, to introduce it at all. But, as Dr. Lyons's letter seems to admit of such a construction, and as it has already misled many into the belief that the review was written by me, I hasten, in justice to myself, to remove such an erroneous impression, by stating that I am not the author, and that I am in perfect ignorance as to who is.

I am, &c.

79, Wimpole-street, W., March 2. CHARLES MURCHISON.

CHLOROFORM IN TRACHEOTOMY AND LARYNGOTOMY.

LETTER FROM MR. HILLIER.

[To the Editor of the Medical Times and Gazette.]

SIR,—Will you allow me to say, in reference to the question raised in your last number by Mr. Henry Smith, on the use of chloroform in cases of laryngeal obstruction where tracheotomy or laryngotomy is about to be performed, that I fully concur with him in the opinion that it is desirable not to administer this agent to persons already half asphyxiated?

In the case referred to chloroform would not have been given but for the earnest solicitation of the patient, and the intention was not to induce complete anæsthesia, but merely to satisfy his urgent desire, and to prevent any increase of mental agitation. Had he not been a Medical man of strong will, his wish would have been disregarded.

I may mention that the patient, having been since informed that he expressed a desire to take chloroform, is much surprised, and can scarcely be persuaded that he was at the time in a condition capable of giving any expression to his feelings, or even of feeling anything, so completely has he forgotten what took place for some hours before the operation.

I am, &c.

20, Upper Gower-street, March 5. THOMAS HILLIER.

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REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Mr. Skey, F.R.S., President, in the Chair.

THE ANNIVERSARY MEETING

was held on the 1st inst. The Report of the Council showed that fifteen Fellows of the Society had either died or resigned, while nineteen had been elected. The receipts had been £1395, the expenditure £1404. The funded property now amounted to £3450. The Index of the Society's books, thanks to the sub-librarian, was now complete. The amalgamation of other Societies with the Royal Medical and Chirurgical Society had been postponed in consequence of some legal difficulties.

THE PRESIDENT'S ANNUAL ADDRESS.

Mr. Skey reported to the Society the names, and read the obituary, of the Fellows deceased during the previous year, the majority of whom are well-known to the Profession The list comprised twelve Fellows, and was as follows:—Giorgio Regnoli; Dr. George Walker; Mr. Ormerod; Dr. J. C. Turner; Sir Henry Marsh, Bart.; J. P. Maunoir, of Geneva; Mr. Norman; Dr. Addison; Dr. Van Oven; Dr. Theophilus Thompson; Dr. Charles Coote; Dr. William Baly. The President then addressed the Society to the following effect:—

"Gentlemen,—The two years of my presidency have elapsed, and I resign my office to my successor, in whom we have selected a gentleman who is known to us by his renowned name and by his high character, both as a Physician and an accomplished man. The Royal Medical and Chirurgical Society is a large and valuable institution to our Profession. As compared with our great Colleges of Medicine and Surgery, it deals with the matured intellect of the man, while the services of the Colleges are engaged chiefly in the dissemination of elementary knowledge required by the student, in promoting education, and qualifying him for his future career in life. Our Royal Society of Medicine calls on the resources of the mind when matured by observation and experience. It may be considered the centre and mart in which eminent members of our Profession exhibit the products of their deeper thought and more elaborate investigations, and from which are educed the practical wisdom by which the conduct and the practice of the Profession are regulated. The papers of our *Transactions* are selected by the Council without favour or prejudice, with a view to carry their influence into the mind of the Profession by the enunciation either of opinions or facts calculated to extend the general knowledge of disease or its treatment; and I am prepared to assert that the services rendered by the Society to the Profession have been remarkable for their extent and value. I will select a few casual papers from the early volumes of the *Transactions*, proving that they have exercised an influence of a very positive kind on the nature and treatment of disease, and many of which were the germs of valuable and standard works."

The President then enumerated the following papers:—On Aneurism, by Sir A. Cooper, Mr. Travers, and Mr. Wardrop; Dr. Prout On Urine; Dr. Blundell On Transfusion of Blood; Mr. Rose On the Treatment of Venereal Diseases without Mercury; the early papers by Sir B. Brodie, On Diseases of the Joints; valuable papers On Organic Chemistry, by Berzelius, Drs. Bostock, Marcet, and Prout; On the Health of the Navy, by Sir Gilbert Blane; Drs. Davis and Lee on Phlegmasia Dolens; and Dr. Marshall Hall's first paper on Loss of Blood.

"We are all familiar with the influence of these papers on the mind of the Profession, and every day's experience tests and confirms their value. What I consider this great Society is entitled to claim is the deference due to the concentrated authority of our Profession in all matters relating to public health and safety. But so long as our authority is not concentrated—so long as division prevails in our councils, of which I might quote a remarkable example on the occasion of a recent debate—we cannot expect the confidence of either the Government or the public. If this object be a desideratum among us, surely it cannot be accomplished till all the associated links are united in a common bond. If our branch Societies are centres of strength, it is strength diffused, and not available to the purpose of enhancing the authority of the Profession. In order to render this power valuable, whether to themselves or the parent Society, it must be concentrated; and on all occasions in which discordant opinions prevail, especially on matters in which public questions of interest are involved, I would respectfully suggest that the question at issue be thoroughly sifted, not by individual inquiry, but by the combined force of a Committee of Fellows appointed by the Council for that especial purpose. And can we claim nothing for the intimate relationship that has for so many years subsisted between the Royal Society and the leading members of our Profession? How large have been their contributions to the *Philosophical Transactions!* May we not reflect with pride that that great Society is at this moment under the presidency of a member of our own Profession?—a man who in his Medical capacity has done more than perhaps any other living author to illuminate the paths of Medical inquiry and promote the cause of truth. In conclusion, gentlemen, it remains for me to commend our great Society to your fostering care, and to express my hope that, in acknowledging the high services it has rendered to the cause of Medicine throughout the world, you will continue to uphold its high name by your occasional contributions to the pages of its *Transactions;* and may we ever bear in mind the one prominent feature of our Profession—that we have no exclusive property in superior knowledge, but that, however acquired, it is only held in trust by us for the benefit of the world."

The following officers and other members of Council were elected:—President: Dr. Babington.—Vice-Presidents: Dr. Balfour, Dr. C. J. B. Williams, Mr. H. C. Johnson, Mr. James Paget.—Treasurers: Dr. Barker, Mr. Charles Hawkins.—Secretaries: Dr. Sieveking, Mr. C. H. Moore.—Librarians: Dr. Barclay, Mr. G. D. Pollock.—Members of Council: Dr. Basham, Dr. Chambers, Dr. Maclachlan, Dr. Pitman, Dr. Wegg, Mr. Bostock, Mr. Samuel Cartwright, jun., Mr. Cathrow, Mr. G. L. Cooper, Mr. Partridge.

Tuesday, February 26, 1861.

A Paper, by Dr. E. A. Kirby, was read, on

A CASE IN WHICH LABOUR WAS TWICE PREMATURELY INDUCED ON A DWARF WITH DISTORTED PELVIS.

The woman whose case formed the subject of this paper is a dwarf of singularly small stature and ill development. In infancy she had rickets, and her osseous system was considerably distorted by the inroads of that disease; but it appeared that some other members of the same family were also very diminutive in stature and development, who nevertheless were exceedingly well proportioned, and apparently free from disease. Therefore, apart from the distortion consequent upon the rickets, she was no doubt a true dwarf. When first seen by the author, in the early part of 1858, she was twenty-seven years of age, had been married twelve months, and had completed her thirty weeks of uterine gestation. She presented a strumous aspect, and her general health was indifferent. On a careful examination, the spinal column and pelvis were found to be greatly distorted. The former, from the last cervical to the union of the last dorsal and first lumbar vertebræ, measured fourteen inches, and presented three curvatures, two lateral and one angular forwards. This latter curvature involved the whole of the lumbar and the last dorsal vertebræ, the bodies of which were thrust forwards, downwards, and to the left. The pelvis was contracted in all its dimensions, and slightly flattened from before backwards; the promontory of the sacrum and last dorsal vertebra projecting forwards to the pubis, narrowing the antero-posterior diameter of the upper outlet to rather less than two inches and a-half. Natural labour under these circumstances being impossible, the choice of operations lay between craniotomy and the induction of premature labour. The latter was determined upon, the time chosen being the thirty-second week of gestation, but it was delayed for a week owing to the patient suffering from bronchitis, and was only completed at about the thirty-fourth. Induction of the

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labour was commenced on January 30, and she was delivered on February 7. On rupture of the membranes, the elbow was found in the vagina, and the shoulder resting on the brim of the pelvis, the child lying transversely. This embarrassing presentation was converted into a footling by turning, and in about twenty minutes the little patient was delivered of a living child. Both progressed favourably, and in a few weeks the woman returned to her usual avocations perfectly well. In this case about two ounces and a-quarter of ergot was employed with the most useful effect, and without occasioning the least bad symptom in mother or child. A few months later, this little dwarf, nothing daunted by her past experience, again became *enceinte*, and having completed her seventh month, applied to the author, who again induced premature labour. This time, however, owing to the lateness of her application, and to the labour proceeding more slowly than in the first case, the delivery was not effected until she had completed her eighth month of uterine gestation, two weeks later than in the previous case, and the fœtal head had attained a degree of development incompatible with its safe passage through so contracted an outlet. The child was therefore lost, but the parent recovered as rapidly as before, and she has not since been pregnant. Her first child has by this time grown nearly as tall as herself. The means employed to induce both labours were fully described, and present several points of interest. On remarking on these cases, the author laid much stress on the value of the operation, and its great superiority to craniotomy, in which operation 1 in 5 mothers dies, while in induction of premature labour 1 only in 50 dies; and half the children are saved. The success of the latter operation he thought greatly depended on keeping the membranes entire until the os uteri was fully dilated, and he reprobated the rupture of them as a means of inducing labour, it being most dangerous to the life of the child, and seldom if ever required.

The paper was accompanied by excellent stereoscopic photographs, taken by Dr. Wright about a fortnight before the last delivery; and, although not the first application of photography to Medical science, this is probably the first paper that has been read to the Society so illustrated.

Dr. Merriman wished to ask the Author why the injection of warm water was not used as a means of exciting premature labour?

The Author stated in reply, that uterine action was readily induced by the means employed.

Dr. Merriman said that in the use of ergot in large quantity, as a means of inducing action of the uterus, there was a fear lest it should cause the death of the child.

Dr. Wright, in reference to the photographs of medical subjects, said, that in speaking to practical photographers, he found that they were constantly asked to take negatives of medical and pathological subjects. The cost of prints from these, he said, was very trifling. He suggested that a portfolio for contributions of photographs would be a very valuable addition to the library of the Medico-Chirurgical Society.

Dr. Greenhalgh had had considerable experience in connexion with deformity of the female pelvis. He had had occasion to perform Cæsarean section twice, and to induce premature labour five times. He could support Dr. Kirby's opinion as to the value of ergot, as he had used it in the five cases of premature labour he mentioned, and with the best effects. He had never seen, and did not believe that any injurious effects to the child were ever produced by the drug. In cases in which the child was born dead after the administration of large doses of ergot, it was reasonable to suppose that death was caused by the long and difficult labour which had rendered the use of the ergot necessary for the accomplishment of delivery. He wished to ask Dr. Kirby what means were taken to ensure exactness in the measurements he had detailed, and if chloroform was used, which he remarked was a very important aid? He (Dr. Greenhalgh) remembered a case which occurred at the Middlesex Hospital, which bore on the subject of discussion. A woman had been sent to the Hospital, in order that Cæsarean section might be performed. The case was carefully entered into by Dr. Hugh Lee and Dr. Merriman's father, and it was agreed that Cæsarean section was the only method by which the child could be delivered. Arrangements were made for the operation, and the instruments were got together; and when all was ready, the child was born alive. Mr. Greenhalgh dwelt on the great difficulty in arriving at an accurate estimate as to the diameter of the pelvis; and had frequently found that very able men differed considerably in the results they had arrived at by examination of the same case. He was asked lately to perform Cæsarean section, but not considering the case calling urgently for immediate delivery by such a severe procedure, he waited several days; he then succeeded in delivering the patient by the aid of the long forceps. The child was putrid, and had evidently been dead some time.

The Author stated that he had obtained his measurements by the aid of the finger, and that Mr. Foster, who saw the case with him, had by the same means formed the same estimate. He considered that there were circumstances attending the second case, which confirmed the opinions he had then formed. The labour had in this instance been delayed two weeks longer. The breadth of the head after delivery was only two and a-half inches.

Dr. Wynn Williams stated that there were cases on record, in which, during the attempt to inject the uterus with warm water, air had entered the veins, and instant death had resulted.

A Paper, by Dr. J. Bullar, was read, on

PULSATING BRONCHOCELE.

Two cases of bronchocele are reported, in which the distinctive complication was the violent pulsation of the carotid arteries and of the enlarged thyroid arteries, communicating the pulsation and thrill to every part of the enlarged lobes. In one of these, (a male,) the pulsation and bruit were so communicated to the lobes, the enlargement of which was of small size, that the case had been suspected to be carotid aneurism, and it required careful examination to be certain of its exact nature. It was brought on by pressure, round the neck, of tight shirt collars, the patient being in a state of great debility. Under a tonic regimen, with quinine, iron, iodide of potassium, in small doses internally, and iodine externally, the pulsation gradually ceased, so that twelve months afterwards the only vestige was a small hardness of one lobe. In the second case, (a female,) the bronchocele was much larger, the pulsation even more pronounced, and with great distension of the veins of the neck. This was combined with disease of the heart, ascites, and anasarca of the legs. Under diuretics (including digitalis and iodide of potassium) and iron, the dropsical symptoms were removed, and at the same time the pulsation and venous distension ceased, and she was restored in five months to comparative health. Iodine externally somewhat diminished the bronchocele. Sir Benjamin Brodie, who saw the first case, in a letter given, states that he has only seen one other. In both cases, that undue prominence of the eyeballs which often attends bronchocele in the anæmic, was well marked, and remained, though diminished.

Dr. Edward Smith was not aware that the cases were so rare as the author supposed. He had seen one case. The subject of it was a lady, aged 20. It was well marked, and the bronchocele pulsated strongly, and varied both in size and in degree of pulsation at different times. There was in this case also disturbance of the uterine functions.

Mr. Brodhurst would ask the opinion of the members present as to what the prominence of the eyeball in such cases could be ascribed to. It had lately been much discussed both in France and in England, and the conclusion arrived at appeared to be that it was due to enlargement of the thyroid. He had seen many cases of enlarged thyroid, in which there had been no such prominence of the eyes.

Dr. Wynn Williams referred to a paper lately read before the Society, and to the discussion which followed it. He believed that it was then generally agreed, that the enlargement of the thyroid and the prominence of the eye were both symptoms of a general condition of debility of the system. He (Dr. Wynn Williams) had seen a case in which bronchocele had proved fatal. The subject of it was a girl, aged 18. At one time the size of the bronchocele diminished under the use of iodine, and for a short time it appeared to disappear altogether. A few months later he was sent for, and found the patient almost in a state of suffocation from pressure of the bronchocele, which had again increased. He divided the sterno-mastoid muscle on each side, but without benefit, and he then made incisions into it,

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but without relief. He had found in cases of bronchocele, that a combination of the bromide of potassium with iodine and the iodide of potassium was the most useful.

A Paper, by Dr. E. Symes Thompson, was read,

ON THE INFLUENCE OF OZONIZED COD-LIVER OIL ON THE PULSE.

The Author began by reminding the Society of a paper by his father, Dr. Theophilus Thompson, published in the *Transactions* (a), in which the attention of the Profession was first drawn to this subject. He recorded the cases of about twenty patients at King's College Hospital, to whom the ozonized oil was administered. The usual dose was two drachms twice a-day. Scarcely any effect was observed from doses of one drachm. The influence of the oil on the pulse increased in proportion to the dose in which it was given, the effect of half-ounce doses, two or three times a-day, being more marked than that of smaller quantities. The following table exhibits, as simply and concisely as possible, the results:—

Table showing the Changes of Pulse under Ozonized Cod-liver Oil.

Name.	Sex.	Disease.	Time of taking Oil.	Pulse.	
				Before.	After.
			Days.		
J. P.	M.	Phthisis, first stage.	7	116	98
J. S.	M.	Ditto.	7	120	108
W. B.	M.	Tuberculous larynx.	21	112	92
M. H.	F.	Phthisis, second stage.	7	80	80
E. A. W.	F.	Ditto.	14	140	112
C. H.	F.	Phthisis, first stage.	14	100	104
R. N.	M.	Phthisis, third stage.	7	150	116
E. D.	M.	Phthisis, second stage.	7	138	112
J. O'D.	M.	Emphysema.	4	104	86
M. M.	F.	Phthisis, second stage.	5	140	108
E. R.	F.	Anæmia.	4	120	116
M. S.	F.	Phthisis, third stage.	2	94	92
E. H.	F.	Phthisis, second stage.	10	104	88
W. S.	M.	Phthisis, first stage.	7	104	104
P. R.	M.	Phthisis, third stage.	4	104	96
S. E.	F.	Phthisis, second stage.	20	120	92
G. M.	M.	Phthisis, third stage.	4	140	120
H. C.	F.	Phthisis, first stage.	2	108	95
W. H.	M.	Phthisis, first stage.	5	120	96
J. R.	M.	Phthisis, first stage.	9	120	98

The Author also recorded the effects of ozone in another form. He had made use of the ozonized water (as prepared by Condy), and found its influence in retarding the pulse considerable. In reference to a belief still prevalent amongst some members of the Profession that ozone was a high oxide of hydrogen, the author remarked that he had used the peroxide of hydrogen (prepared by Messrs. Bullock), and found that it exerted no special influence on the pulse, which was more often accelerated than retarded under its use, which seemed to corroborate the conclusions of Dr. Andrews, who showed (in the "Philosophical Transactions of the Royal Society," vol. cxlvi. p. 1, *et seq.*) that ozone was not an oxide of hydrogen, but simply an allotropic modification of oxygen. Of the 20 cases in which ozonized oil was given, in 11 the pulse was reduced more than 20 beats a minute; in 4, upwards of 10 beats; in 1, no effect was produced; and in 1 only was any permanent acceleration observed, and this could only be fully accounted for by disturbing circumstances. Of the 7 cases in which ozonized water was given, in 3 the pulse was lowered more than 20 beats, in 3 about 10 beats, and in 1 it was at one time retarded and at another accelerated. Dr. Thompson drew special attention to the importance of the inquiry as connected with the treatment of phthisis, since, in this disease, anything that could retard the excessive rapidity of the vital changes would likewise check the development and progress of the disease. He showed that this had long been realised by the Profession, and mentioned several remedies that had been used for this end, especially digitalis, which, though useful in some cases, was greatly inferior to ozone, being both less certain in its action, and often dangerous, from its cumulative tendency; while ozone exerted on the heart, not a depressing, but a strengthening and invigorating influence. It was suggested that the explanation of the remarkable effect of ozone in phthisis might be found in the greater affinity which phthisical blood had with oxygen,—an affinity which it also preserved when in the allotropic form of ozone. Before concluding, the author alluded to a paper recently published by a French Physician, "On the Use of Ozonized Oil of Turpentine in Hæmoptysis," in which the suggestions made by Dr. Theophilus Thompson, in 1859, had been followed, and observed that he had himself prescribed turpentine with ozonized cod-liver oil in hæmoptysis with much benefit.

Dr. Edward Smith remarked on the difficulty of ascertaining the rate of the pulse free from all doubt as to its being accelerated by special causes. For instance, the excitement of entering the consulting-room, the posture, etc., would exercise a marked influence. Another point of great importance was to take the cases all under the same circumstances, as regards the time of day and the period after a meal.

The Author, in reply, stated that all the cases were out-patients. The patients attended between the hours of one and two o'clock. He believed that they would, as a rule, have dined about twelve or half-past.

(a) *Transactions of the Royal Medical and Chirurgical Society*, vol. xlii. 1860.

HARVEIAN SOCIETY OF LONDON.

Thursday, February 21, 1861.

Dr. Sieveking, President, in the Chair.

A discussion, introduced by Dr. Longmore, upon the use of the

TURKISH BATH,

enabled many of the members present to record their personal experience of its effect upon them; and his views regarding its employment as a remedial agent. The general opinion of the speakers seemed to be that in many chronic affections, "where not contraindicated by disease of the heart or vessels," it might prove of great benefit as an adjunct to other remedies, especially when time and experience had proved to what degree of temperature it might with safety be employed in this climate. A feeling against the present fashion of its indiscriminate employment by the public, was not only unanimously expressed, but supported by the relation of several instances in which it had produced alarming syncope.

Mr. Weeden Cooke made a communication, respecting

THE SURGICAL DISEASES OF THE TONGUE,

and illustrated it by numerous drawings of the various pathological conditions of that organ, casually glancing only at the varying aspects of the papillæ in diseases which come more immediately under the notice of the Physician. Mr. Cooke gave a rapid survey of those injuries and diseases of the structure of the tongue, which are generally considered to be Surgical cases. *Wounds*, whether incised, contused, or lacerated, invariably heal rapidly in healthy constitutions, a circumstance which was doubtless due to the high organisation of the part, and in some measure, perhaps, to the beneficial influence of the salivary secretion. *Idiopathic glossitis* was a remarkable disease, arising at times without any assignable cause, and happily entirely under the control of the Surgeon. Incisions and antiphlogistic treatment very quickly overcame the malady. *Hypertrophy*, depending either on chronic inflammatory action or on tuberculosis, was a more serious and protracted lesion of this organ. In either case it was an indication of diminished vital power, and for its relief cod-liver oil and iron, with or without iodide of potassium, and generous diet generally proved most beneficial; but it was always a troublesome affection, the cure of which required much patience and prudence on the part of the sufferer. Sea-air was always most serviceable in these cases. *Ulceration*, occurring in this organ, was either aphthous, dyspeptic, strumous, syphilitic, or cancerous. The proper diagnosis of the origin of the ulcer was most important, inasmuch as the treatment required in each case was peculiar to itself, and could not be beneficial unless addressed to the systemic condition out of which arose the ulcer under consideration. After describing the aphthous, dyspeptic, and strumous ulcers of the tongue, and exhibiting drawings of them, Mr. Cooke contrasted especially the syphi-

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litic and cancerous ulcers of this organ, and stated that they were often confounded; that syphilitic ulcers, with much induration of the tongue had been treated as cancerous, remaining for years without benefit until, the proper diagnosis being arrived at, they had been cured so rapidly as to excite wonder on the part of the patient. Whenever a person presented himself with an ulcer of the tongue it was always necessary to investigate minutely his whole constitutional history, observing with especial care any cutaneous eruption of even the most trifling character. Thus armed, we may take into consideration the peculiarities of the local ulcer, and so arrive at a mature judgment respecting the group in which it should be classified, the treatment it should undergo. "And in these investigations," said Mr. Cooke, "it is necessary to take nothing for granted, the patient often deceives himself, or is really ignorant of his having a syphilitic taint; and if we do not examine carefully for ourselves we also shall be led astray in the diagnosis upon which depends the life and happiness of the patient, as well as our own credit as skilful Surgeons." After describing the different characteristics of syphilitic and cancerous ulcers of the tongue, Mr. Cooke alluded shortly to the distinctions between *Syphilitic and Cancerous Tumours* of this organ, showing that the soft, elastic feel of the one contrasted vividly with the hard, cartilaginous sensation produced by the other. *Operations* for cancer of the tongue never succeeded in checking the disease for any length of time. If it did not return in the organ itself, the sublingual or submaxillary glands quickly took on the same action, and the misery of the patient was enhanced by the transfer. Of the three modes of operating, —by ligature, by the knife, and by the écraseur, Mr. Cooke had no doubt that the knife was the most desirable. He had seen some very bad results from the use of the écraseur. *Local and Constitutional Treatment* was of the utmost value in the malignant as in the non-malignant affections of the tongue. In the latter class a cure was always to be effected, while in the former much relief from suffering was to be obtained; and in some instances the disease had been arrested in its progress. Lotions of chlorate of potash, sulphate of copper, borax, etc., were commended, together with the internal administration of the mineral acids, bark, iron, and cod-liver oil.

In the discussion which followed, Dr. HARE, Dr. SIEVEKING, Dr. CAMPS, and other members, took part.

MEDICAL NEWS.

APOTHECARIES' HALL. — Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, February 28:—

Howarth, George, Southport, Lancashire
Orton, Theodore, Matlock Bath, Derbyshire
Skrimshire, John Truscott, Holt, Norfolk
Thorp, Sidney, Maldon, Essex
Watts, John, Haverfordwest.

The following gentleman also on the same day passed his First Examination:—

Rogers, William Goddard, St. Bartholomew's Hospital.

APPOINTMENTS.

GRIFFITH.—Dr. Griffith, the Medical Officer of Health for the parish of Clerkenwell, has been appointed Analyst under the recent Act of Parliament.

MACINTOSH.—Mr. Macintosh has been appointed House-Surgeon to the Brighton and Hove Lying-in Institution.

MONCKTON.—Dr. Stephen Monckton (hitherto of Brenchley, Kent,) was appointed Physician to the West Kent Infirmary, Maidstone, on Feb. 8.

DEATHS.

COLE.—February 3, at Quebec, Lower Canada, John R. Cole, L.R.C.S. Edin., aged 29.

FRANCIS.—Recently, at New York, Dr. J. W. Francis, the most eminent of the Medical Profession in the United States, aged 70. He was a schoolfellow of Washington Irving, enjoyed intercourse with Walter Scott, Abernethy, and Kean, and went to the *soirees* of Sir Joseph Banks, in company with the American Artist Leslie. His house was the resort of authors, artists, and *litterateurs*.

HARTLE.—May 12, 1860, Robert Hartle, Deputy Inspector-General of Hospitals (half-pay), Port of Spain, Trinidad.

SAUNDERS.—February 28, Charles Saunders, of Jarrow-on-Tyne, M.R.C.S., L.S.A.

SQUIRE.—Lost in the *Cleveland*, which has not been heard of since May 3, when spoken with near the Mauritius on the homeward passage from Madras, Chas. Farran Squire, Assistant Surgeon 23rd Welsh Fusileers.

WHITNEY.—February 28, Thomas Whitney, for many years a Practitioner in Bath, aged 83.

THE inquest on the late lamented Dr. Baly, after innumerable adjournments, has resulted in a verdict of "Accidental Death," with a recommendation that additional break-power should be applied to all passenger trains.

IT is said that the reindeer can get over the ground at the rate of 19 miles an hour, and that one in Sweden, in 1699, drew an officer the incredible distance of 800 English miles in 48 hours.

THE wild grape grows abundantly over most of Canada, and as high as 50° in Hudson's Bay. In Germany, the grape is cultivated as high as 51° in a summer temperature of 63°; but in localities with summer temperature at 67° and 68°, the vine yields the most abundant and good wine. The Canadians are giving considerable attention to vine culture and that of other fruits.

BODY-SNATCHING AT MONTREAL.—Six bodies stolen from the dead-house at Longeuil a short time ago, were found in the St. Lawrence Medical School, Montreal. An immense crowd was collected, who gave expression to feelings of disgust. The bodies were discovered buried in a hole in the cellar.

POPULATION OF LONDON.—The Registrar-General says:—"London is the greatest of the imperial cities; for its population in 1851 amounted to 2,362,236, living in 305,933 houses, peopling streets and squares extended over 122 square miles, along the terraces of land rising from the banks of the Thames. What its population is in this year (1861) the census to be taken in April next will show. Hitherto the increase of the population of London has, however, in successive periods, been more constant than the increase of the population of the United Kingdom; its numbers having fluctuated less, perhaps, because it is in some respects the metropolis of a large part of the world. And at the rates of increase which have prevailed in the present century the estimated population of London, in the middle of the year 1860, must have been twenty-eight hundred thousand, viz. persons, 2,829,130; males, 1,325,268; females, 1,503,862."

ROYAL MEDICAL BENEVOLENT COLLEGE.—A special general meeting of the Governors of this Institution was held at the office in Soho-square, on Monday last, the Earl of Powis in the chair, for the purpose of electing a President, in the place of the late Earl Manvers, and for some other business. Mr. Propert proposed, and Mr. Francis Webb seconded, a resolution, "That the Right Honourable the Lord Chelmsford be appointed President of the Royal Medical Benevolent College," which was unanimously agreed to. A resolution was then passed, authorising the Treasurer to receive all monies coming to the College by gift or bequest, and to give valid receipts for the same; and another resolution, authorising the Council to give permission to the widows of pensioners who may die at the College to remain there and retain the benefits enjoyed by their late husbands. The meeting then broke up, after a vote of thanks to the chairman, proposed by Dr. Conolly and seconded by Sir Charles Locock. In returning thanks, the Earl of Powis expressed a hope that all the Governors then present would meet him again at Willis's-rooms on the 17th of May, when he had promised to take the chair at the annual festival of the College.

KING'S COLLEGE HOSPITAL.—At the annual meeting of this charity, the report stated that the in-patients during the past year amounted to 1333, and the out-patients to 31,196: cases of midwifery to 624. The average time the in-patients were in the Hospital was 33 days, and the average cost to the Hospital 4*l.* 11s. The receipts during the past year, including the sum of 2500*l.* borrowed from the bankers, had been £6851 16s. 7d., and the ordinary expenditure £6668 13s. 5d. The legacies bequeathed during the past year amounted to £410, and the legacies received during the year were £1610. The zeal and devotion of the members of St. John's-house had conferred great benefits on the Institution by their connexion with it. Their system of nursing had been very

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beneficial to the Hospital, and the Governors had accepted an offer made by the Lady-Superintendent of St. John's-house to increase the efficiency of the Hospital. The offer made was to place a separate space as a lying-in ward under the control of Dr. Farre, and the associated sisters of St. John's-house would bear the entire expense of it, by which means a body of efficient nurses would be provided. The committee were happy to be able to announce the approaching completion of the second and largest portion of the Hospital.

THE WEATHER AND PUBLIC HEALTH IN SCOTLAND IN 1860.—The Registrar-General for Scotland says:—"The year 1860 was one remarkable for its meteorological phenomena, and just as remarkable for the deadly influence which these exerted on the inhabitants of the eight principal towns of Scotland. The general characteristics of the weather during the year were, low mean temperature, excessive humidity of the atmosphere, a quite unusual prevalence of easterly winds, and a consequent scantiness of westerly breezes, and, towards the close of the year, an intensity of cold greater than has been experienced in this country during the present century. These adverse agencies reacted on the public health in a most prejudicial manner, and were the main agencies which caused the deaths during the year so far to exceed those of former years. This is rendered very apparent by the fact, that the proportion of deaths from the whole class of epidemic and contagious diseases was considerably under that of previous years, while the mortality from inflammatory affections of the respiratory organs—diseases which are universally acknowledged to be mainly dependent on the weather—were very much above those of previous years. In Scotland the observations of a few years have shown that weather, as exhibited more especially in the mean monthly temperature, has much more to do with the number of deaths than diseases of any class whatever. It is quite true that every individual must die of some disease, but the kind of disease, and its proportional fatality seems to be almost completely under the influence of the weather, or atmospheric agencies, of which mean temperature is the most important. This, as in former years, was clearly manifested during 1860. Thus, December 1859, with its mean temperature of 34·9, killed 76 persons daily. But the effect of cold seems to go on rather increasing for a short time, for though the mean temperature of January 1860 was one degree higher, or 35·9, it was not sufficient to arrest the effects of the low temperature, so that during that month the daily deaths amounted to 82. February, however, proved as cold as December; its mean temperature was 34·9, and from acting on those already weakened by the previous cold, the daily deaths rose to 96. This was the greatest number of deaths which occurred during any month of the year; and from this month the daily number of deaths slowly decreased to 53 in September. One marked exception to this steady decrease was remarked, and it is worthy of notice, as it shows in a striking light the noxious influence which easterly winds exert. Thus, during March, when there were only three days on which winds blew having a more or less easterly point, the deaths numbered 83 daily. During April, however, though the mean temperature was three degrees warmer, such was the potency for evil of the easterly, which were the prevailing, winds during the month, that instead of the number of daily deaths being below those of March, they were above it, for 84 persons died daily during April. This baneful influence of the easterly winds was strikingly exhibited in a few diseases and classes of disease. Thus, in hooping-cough, while only 82 deaths occurred in the eight towns during March, they rose to 104 during April. Diseases of the respiratory organs, which cut off 576 persons during March, proved fatal to 608 in April, though the month is a day shorter. 89 deaths from diseases of the heart, etc., occurred in March, but 115 in April. 206 deaths from diseases of the brain occurred in March, but 216 in April; and the deaths from old age, which numbered 132 in March, increased to 149 in April. These facts, then, clearly prove the superadded noxious and fatal effects of easterly winds, and it need scarcely be added that their fatal effects are increased in the exact ratio of the lowness of mean temperature which attends them; so that in a year or month when the mean temperature is lower than usual, their action is more deadly. The inflammatory affections of the respiratory organs, however, are the diseases which more strikingly evidence the influence of temperature on the mortality. Thus, during the coldest month, February, the deaths from these diseases amounted to 813, while in the temperate month of September they only proved fatal to 135 persons. The past season affords another proof of the statement made in last year's report, that in this country the mortality of the epidemic diseases (with the exception of the bowel complaints and measles) follows the same rule as that of all other causes, viz., increases with the cold and diminishes with the return to a mild temperature. Thus, take the whole class of the zymotic diseases, their least mortality was in May, June, July, August, our warmest months, the daily deaths from these causes varying from 13 to 15 only. As the temperature fell, however, the deaths from the zymotic diseases increased, so that during September 16·2 deaths occurred daily. These increased to 20·3 in October, to 20·6 in November, to 20·7 in December, and to 21 in January. These facts, therefore, seem to justify and support the conclusion drawn in last year's Report, that 'however fruitful emanations from decaying animal or vegetable matters, or from undrained or marshy districts and localities, may be in exciting bowel complaints, they do not directly give rise to the ordinary epidemics which prevail among us. These emanations seem rather to act by lowering the general tone of the system, and rendering it more liable to the attacks of whatever epidemics may be at the moment prevailing.'"

BOOKS RECEIVED.

Essays and Observations, by John Hunter, arranged with Notes by R. Owen, F.R.S. London: 1861.

Archæology: its Past and Future Work. By J. Y. Simpson, M.D. Edinburgh: 1861.

Lives of Eminent American Physicians and Surgeons. Edited by S. D. Gross, M.D. Philadelphia: 1861.

Principles of Forensic Medicine. By W. A. Guy, M.B. Second Edition. London: 1861.

Waxy or Amyloid Degeneration of the Kidney. By T. G. Stewart, M.D. Edinburgh: 1861.

A Manual of Qualitative Analysis. By R. Galloway, F.C.S. Third Edition. London: 1861.

Physiology of Man, and his Maladies. By W. Parker, M.R.C.S. London: 1861.

Hints on Insanity. By John Millar, L.R.C.P. Edin. London: 1861.

Ten Years; an Inauguaral Lecture. By J. A. Symonds, M.D. London: 1861.

The Foot and its Covering. By J. Dowie. London: 1861.

A Medical Handbook. By F. W. Headland, M.D. London: 1861.

The Portable Gymnasium. By F. G. Ernst. London: 1861.

VITAL STATISTICS OF LONDON.

Week ending Saturday, March 2, 1861.

BIRTHS.

Births of Boys, 1020; Girls, 1008; Total, 2028.
Average of 10 corresponding weeks, 1851–60, 1761·8.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	643	595	1238
Average of the ten years 1851–60	636·7	624·5	1261·2
Average corrected to increased population..	..	..	1387
Deaths of people above 90	3	7	10
Deaths in 15 General Hospitals	42	33	75

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1851.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	376,427	..	3	4	..	10	5	6
North ..	490,396	3	8	7	1	22	3	4
Central ..	393,256	..	5	5	2	8	5	2
East	485,522	2	3	4	2	15	6	2
South ..	616,685	1	4	10	1	31	2	4
Total.. ..	2,362,236	6	23	31	6	86	21	18

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METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29 800 in.
Mean temperature	42·5
Highest point of thermometer	53
Lowest point of thermometer	30·7
Mean dew-point temperature	40 4
General direction of wind	N.E. S.W.
Whole amount of rain in the week	1·05 in.

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,,	15	,,	,,	12	,,
,,	20	,,	,,	26	,,
,,	30	,,	,,	52	,,

Dr. Fergus's letter is unavoidably delayed until next week.

An Old Subscriber probably refers to Palm Oil, as used by the "Prussian Oculist," whose history is given to-day in the letter of our Boun Correspondent.

C. C.—Baumé's Hydrometer is commonly used on the Continent for liquids heavier than water. The real specific gravity of a liquid of 30° Baumé is 1·245, of 40° it is 1·357, of 45°, 1·420.

Dr. Bishop's letter is in type.

Mr. Toynbee's paper shall appear next week.

Dr. Anderson's 6th and 7th papers have been received.

Mr. Wyatt's case shall appear next week.

Mr. Parker will find the Scale of Charges for Advertisements printed in every number.

Notes and Queries.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—What is the supposed "active principle" of the common spider's web? As it is now so extensively employed, in India, in the treatment of fevers, it is desirable that it should be known. I may here observe that until chemistry demonstrated that iodine was the base of burnt-sponge, Medical Practitioners were rather incredulous as to its virtues.

I am, &c

James Bruce.

Army Assistant-Surgeons.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—It is now generally known that it has been determined to reduce the number of Medical officers in the Army, in order to effect a saving in the Army expenditure. Yet, either from design, or oversight, a writer in the *United Service Magazine* for this month states that the Medical Department is the only one which is to be increased; he has omitted noticing the number of Regimental Assistant-Surgeons who are to be placed on half-pay. Will any of your readers who are acquainted with the subject explain how it happens that in the published Army estimates for 1861—that most complicated of seemingly simple publications—there does appear to be an increase in the number of Staff-Assistant-Surgeons? For it is evident the increase is in appearance only, or otherwise the Regimental-Assistants would not have been told that they were to prepare to be placed upon half-pay.

This is a subject of public interest in the profession; for to those who may be considering the questions of starting in private or other practice, and entering into the public service, it must be important to know what their chances for fair employment, pay, and promotion in the latter are.

An Assistant-Surgeon in the Army.

Case of Acephalous Pseudo-Hermaphroditism.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The following case occurred in my practice a short time ago:—Mrs. S., a married woman, 40 years of age, who had borne nine living children five of which were abnormal presentations commenced in labour. For about four or five days she had very short pains, and I suspected another abnormal presentation. I made an examination per vaginam, and found the os uteri dilated to about the size of a sixpence. She went on day after day having short pains, but making no progress whatever. Suspecting, from the inefficiency of the pains and her uneasy sensations, a large quantity of liquor amnii, I punctured the membranes and discharged about a gallon of water. After this the pains became much more regular, and I found the feet presenting. In due time the fœtus was born—Acephalous as far as I could see. The vagina seemed normal, though small; but a scrotum with two testicles depended from the posterior part of the labia majora, and, in fact, seemed a prolongation of them. The head had a most curious outline, there was next to no forehead, it seemed as though the calvarium had been removed. I could distinctly feel the depressions in the base of the skull, though the hairy scalp was perfect. The chin was completely grown to the upper surface of the chest. As regards limbs and in all other respects it was a fine looking child though still-born. The patient herself accounts for it by being terribly frightened by a drunken man just after she had quickened. Unfortunately I was unable to obtain a post-mortem examination.

I am, &c.

Wm. Holt, M.R.C.S. Eng., L.S.A.,
Medical Officer West Horton District, Bradford Union.

Great Horton, near Bradford, Yorkshire, March 2.

COMMUNICATIONS have been received from:—

M. Claude Bernard; Mr. Le Gros Clark; Mr. Wyatt; Mr. Propert; Mr. Toynbee; Dr. Herbert Barker; Dr. Hillier; Registrar-General. Dr. Kidd; Mr. Holt; Dr. Arlidge; Dr. Anderson; Mr. Monteith; Mr. Watts; Dr. H. Monckton; Dr. Headland; Mr. Hislop; Mr; Ponn; Mr. Squire; Mr. Boolh; Mr. Parker; Mr. Bruce; Dr Bishop; Mr. Workman; Mr. Fortescue; Mr. Hamilton; and Mr. Wheatley.

APPOINTMENTS FOR THE WEEK.

March 9. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

Royal Institution, 3 p.m. Dr. E. Frankland "On Inorganic Chemistry."

11. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

Medical Society of London, 8½ p.m. Thomas Bryant, Esq., "Suggestions for an Improved Practice in Strangulated Hernia."

12. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

Royal Institution, 3 p.m. Professor Owen "On Fishes."

Royal College of Surgeons of England. Professor Savory "On the Physiology of Food."

Royal Medical and Chirurgical Society, 8½ p.m. Dr. Markham "On the Mechanism of the Action of the Valves of the Heart." Mr. Toynbee "On Molluscous Tumours in the External Meatus."

Junior Medical Society of London, 8 p.m. General Meeting of Medical Students for Consideration of Constitution, etc., at King's College, Strand.

13. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

Royal College of Physicians, 4 p.m. Dr. Barker "On Diseases of the Serous Membranes."

Hunterian Society, 8 p.m. Dr. Barnes "On the Means of Accelerating Labour in Cases of Placenta Prævia." Council Meeting at 7½ p.m.

14. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.

Royal Institution, 3 p.m. Professor Tyndall "On Electricity."

Medical Society of King's College, 8 p.m. Mr. Clarke "On Cancer."

15. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

Royal College of Physicians, 4 p.m. Dr. Barker "On Diseases of the Serous Membranes."

Royal Institution, 8 p.m. Latimer Clark, Esq., "On Electrical Quantity and Intensity."

Western Medical and Surgical Society of London, 8 p.m. Dr. Barclay "On a Case of Hysterical Mania."

EXPECTED OPERATIONS.

King's College Hospital.—The following Operations will be performed this day (Saturday) at 2 o'clock:—

By Mr. Fergusson—Removal of Growth from Alveolus; for Extensive Necrosis of Femur; for Fixture of Jaw from Cicatrices of Ulcers.

By Mr. John Wood—For the Radical Cure of Hernia.

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PULVIS JACOBI *VER.*, NEWBERY'S.

To the Medical Profeſſion of Great Britain and Ireland.

GENTLEMEN,—We beg to call your attention to the following extracts from a Paper by the late John Cheyne, M.D., F.R.S.E., M.R.I.A., Phyſician to the Hardwicke Fever Hoſpital, Dublin, and Phyſician-General to His late Majeſty's Forces in Ireland, &c. &c., contained in the "*Dublin Hoſpital Reports*," *vol.* 1, *p.* 317.

"Since this caſe came into my poſſeſſion, I have been led to "make a good many clinical experiments, which have enabled me "to verify the reports which I had heard of the efficacy of JAMES'S "POWDER, in ſometimes removing the APOPLECTIC DIATHESIS in "perſons advanced in life. It is, moreover, worthy of obſervation, "that JAMES'S POWDER has been of remarkable utility in "certain inſtances of DETERMINATION OF BLOOD TO THE HEAD, which "occurred at an early period of life, and threatened to end by "effuſion. Laſtly, in two caſes of GENERAL PLETHORA, in which, "however, the head was more affected than any other part, "JAMES'S POWDER was exhibited by me with perfect ſucceſs."

Alſo *vol.* 1, *p.* 320.

"The following very ſimple method of exhibiting JAMES'S "POWDER, in caſes of undue determination of blood to the "head, is that which I have generally purſued. The patient is "made to begin with a very moderate doſe, not more than two "grains at bedtime, and to increaſe the doſe by half-a-grain every "night, until ſome ſenſible effect is produced upon the ſtomach, "bowels, or ſkin. Should the ſtomach be affected with ſickneſs, "the doſe muſt be leſſened by one grain on the following night. "By the addition of a little rhubarb to it, a larger quantity of "JAMES'S POWDER may be adminiſtered than the ſtomach could "otherwiſe bear. If the ſkin is ſoftened, or the bowels affected, "the doſe ſhould not further be increaſed, but it muſt be repeated "every night for a conſiderable length of time: in ſeveral inſtances "I have known eighteen or twenty grains taken for a conſiderable "period without any inconvenience."

The following extract (ſhowing the increaſing eſtimation in which the true Dr. James's Powder is held by Medical Practitioners) is taken from "The Lumlæan Lectures," 1858-59, delivered before the Royal College of Phyſicians, by A. Tweedie, M.D., Phyſician to the London Fever Hoſpital, who is admittedly one of the higheſt practical authorities on the ſubject of Fever. He ſays, ("*The Lancet*," *June* 16, 1860, p. 590,) as follows:—

"If the febrile excitement be ſuch as to require antimonial prepa- "rations, a pill containing 2 or 3 grains of James's Powder (prepared by "Newbery ſhould be taken at intervals according to circumſtances."

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This ſubſtitution muſt bring diſappointment, and of courſe deter Practitioners from preſcribing Dr. James's Powder, or lead them to regard it as a preparation on which no dependence can be placed.

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ORIGINAL LECTURES.

CLINICAL LECTURES

DELIVERED AT

ST. THOMAS'S HOSPITAL IN 1861.

By F. LE GROS CLARK, F.R.C.S.

Surgeon to the Hospital.

LECTURE VII.

FRACTURES OF THE LOWER EXTREMITY.

GENTLEMEN,—The subject which I shall bring under your notice in to-day's Lecture is Fractures of the Lower Extremity; and I thus propose to illustrate, by clinical remarks, the principles which I have endeavoured to inculcate in my Surgical course. I will first narrate briefly the cases which I intend to make the subject of comment. They are recorded by my dressers, Messrs. Hunter and Waller.

Case 1.—T. S., aged 41, a stoker, was admitted on September 22, 1860. He fell from the engine which he was tending, and the "beam" struck him on the thigh. The femur was found to have sustained a comminuted fracture in its middle third, and there was a small wound on the outer side of the limb, corresponding to the seat of fracture. The thigh was much swollen, and the right arm also much contused; but the patient seemed to have been very little prostrated by the injury. The limb was placed on a double-inclined plane, which was changed, after the lapse of four or five days, for a long outside splint, so arranged as to admit of the wound being dressed. Up to this time there was entire absence of constitutional sympathy with the local injury, but shortly afterwards symptoms of nervous delirium declared themselves (he had been a sober man), which required morphia to allay; and subsequently he went on uninterruptedly well, the wound healing kindly; and he left the Hospital, at the expiration of two months, with a good limb.

Case 2.—J. W., aged 51, labourer, was admitted on October 23, 1860. A heavy weight had fallen on his right leg, and broken the tibia at the junction of the middle and lower thirds; the fibula was fractured rather above its centre. The line of fracture was found to take a zigzag direction, which made it very difficult to place the broken ends in relation. Indeed, for a length of time every effort to retain the fragments in position was frustrated. Various positions were tried, and different splints employed; but the muscular spasm constantly caused displacement. The patient's health was feeble, and I was indisposed at first to have recourse to tenotomy; but, as the fracture threatened to become compound, and there was no attempt at union, I ultimately divided the tendo Achillis, and was then enabled to adjust the broken ends of the bone. For a considerable time all seemed to be going on favourably; but at the end of six weeks the fracture still remained ununited, and troublesome displacement again recurred, probably from the muscle having regained its power. I now discovered, what the man had before concealed, that he had been a gin-drinker, and I accordingly supplied him with his wonted stimulus, which seemed to have the desired effect, for union has taken place, and with scarcely perceptible deformity of the tibia; but the lower fragment of the fibula projects external to the upper, in which position it is united, owing, as I apprehend, to the intractability of the larger bone in the earlier treatment.

Case 3.—C. W., aged 26, a sailor, was admitted on January 1, 1861. His right leg had been crushed between the tiller and side of a barge; both bones were broken at the lower part of the middle third. The line of fracture of the tibia was very oblique, in a direction downwards, forwards, and inwards; there was great swelling. The leg was placed on an outside splint at first; but the muscular spasm and consequent displacement of the fracture necessitated a change. The limb was placed successively in a Liston splint and in a swing box, without the desired effect. Tenotomy was not practised, as the anterior muscles were as much at fault as the gastrocnemius. At last the long outside splint was applied, as in cases of fractured femur; and since then the fracture has been under control, and is doing well.

Case 4.—E. W., aged 62, a bricklayer, of intemperate habits, was admitted on December 1, 1860. He stated that a ladder broke under him, when he was about five feet from the ground, and he fell on the flag-stones on his right side. His left leg, he said, did not touch the ground, but fell across the other leg; he was conscious that some of his bones were broken. The right thigh was found fractured in two places,—close to the trochanter, and in its lower third; there was much shortening from retraction. The left tibia had suffered a comminuted fracture high up, indeed just below the tubercle. The thigh was fixed to a long outside splint, and the leg laid in a Liston splint, slightly flexed. No fracture of the fibula could be detected. This patient's habits rendered it necessary to give him morphia at first, and to supply him with an allowance of gin, as he showed signs of tremor and nervous irritation. During the treatment he had several attacks of gout in different limbs, to which he had been subject; this was relieved by colchicum. At the expiration of seven weeks both fractures of the thigh were firmly united and in good position; but the tibia was still moveable, and was, therefore, replaced in the splint. At the present date it is becoming firmer, though still not united. It appears as if a small isolated disk of bone were interposed between the two fragments; the amount of callus thrown out around the fracture is very limited.

Case 5.—G. G., aged 50, admitted on February 6, 1861. He was intoxicated when the accident by which his thigh was broken occurred, but believes it was caused by his leg twisting under him, as he slipped down in the street. The thigh was fractured near the centre. The limb was put up with a long outside splint, and the adjustment is satisfactory.

Case 6.—J. M., aged 38, a carpenter, was admitted on February 11, 1861. He stated that he was stepping backwards from off a stone about two and a-half feet high, when his heel came in contact with some inequality on the ground and his leg was consequently thrown forwards and doubled under him. Feeling that he had sustained some serious injury, he made no effort to help himself, but lay quietly on the ground until assistance arrived. The tibia was fractured at its lower third; there was considerable swelling over the outer malleolus, but the fibula was not broken; consequently, there was scarcely any tendency to displacement of the tibia, except a slight bowing forward. The limb was placed on an outside splint, and the patient is perfectly comfortable. The swelling over the outer malleolus has subsided.

Case 7.—L. T., aged 9, was admitted on January 10, 1861. She had fallen from a chair and broken her thigh about its centre. The angularity of the displacement and trivial nature of the exciting cause of fracture were explained by the history of the child. She presented a remarkable precocity of physical development, in some respects, and was evidently the subject of an abnormal condition of the osseous development, as each thigh had been fractured twice on previous occasions. The sound limb was so distorted that the femur was bent in its centre at an obtuse angle. Both legs, below the knee, were straight; an attempt was made to adjust a long straight splint; but it was rendered fertile by the previously-existing deformity, and spasm of the psoas and iliacus muscles. A Liston's splint was, therefore, substituted, and by gentle pressure on the upper fragment a good position was obtained. On February 9, the union was firm, and the form of the limb improved: indeed it now has the advantage of the opposite limb in length and shape; although the uninjured thigh has certainly become straighter during her sojourn in the Hospital.

Case 8.—M. A. R., aged 60, married, was admitted on Jan. 5, 1861. She was the subject of compound and comminuted fracture of the tibia; the wound, however, was but small, and the limb, when placed on a back splint, was brought into very fair position. The fibula was also broken. This woman could not give any satisfactory account of her accident, as she was intoxicated at the time it occurred. There was oozing of venous blood from the wound. As it was determined to endeavour to save the limb, it was placed in a Liston splint. A good position was thus maintained, and the case progressed as well as could be expected for a time. After the lapse of a week or ten days the leg, which was swollen before, became tense with inflammatory effusion; an erysipelatous blush spread over its surface, and vesications formed at different points. The discharge became more abundant and less healthy; and it was necessary to afford relief by making an

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opening at the side of the calf, to facilitate the drainage of the areolar tissue. After this there was decided improvement, both local and general; yet the patient did not take a sufficient quantity of nutriment, but was supplied with wine and porter. The question of amputation was repeatedly entertained, and at last determined by the sudden loss of a large quantity of arterial blood at the close of the third week. For two days after this occurrence the patient resisted the removal of the limb, but at last consented. Amputation was performed below the knee, under chloroform, and scarcely any blood lost: the state of exhaustion was very great before the operation, but not perceptibly increased by it. She survived the amputation nearly a week, giving good promise of recovery at first, and taking freely of nourishment. But the stump remained inactive; there was no effort at reparation: a thin ichorous discharge oozed from it, and there was not even a blush of inflammation around it. Once during the week she had rigor, with a flushed face and hot skin; and it was suspected that this might be symptomatic of pyæmia. Exhaustion increased, notwithstanding the willingness of the stomach to accept nutriment without even nausea. On the day before her death there was fresh hæmorrhage, though to a trifling extent: the thigh became tense with œdema, and she died on the 3rd of February, four weeks after the accident. The autopsy revealed no disease, nothing but general anæmia. The source of hæmorrhage in the amputated member could not be traced on dissection; but no doubt one of the tibial vessels had given way from the deep extension of phagedenic ulceration.

The foregoing cases afford illustration and subject for comment on the following points:—The mode in which fracture of the lower extremity occurs. The immediate and remoter consequences and treatment of such fractures. The causes of non-union and their remedies. The treatment of compound fracture. On each of these points I propose to make some remarks.

Fracture of the thigh or leg may result from either direct or indirect force; that is, the force may be applied immediately at the seat of injury, or at a point remote from it, and the bone give way in consequence. Thus, a violent blow, the fall of a heavy body on the limb, or the passage of a wheel over it, may break the bone; Cases 1, 2, and 3, exemplify this mode of fracture. In Cases 4, 5, 6, and 8, we have illustrations of fracture by indirect violence; and when this is the case, the force operates on the bone itself as on a lever, and it gives way commonly at its weakest part, unless the muscular action or some other implied resistance determine the lesion at another point. Indirectly, therefore, the muscles play a part in these fractures; but I cannot recall any instance in which I have been able to ascribe fracture of the bones of the leg or thigh to muscular action only, except, indeed, the patella, which is often broken without being struck. Of course I speak of healthy bones; for diseased bones are fractured from trival causes, as exemplified in Case 7.

Patients have often great difficulty in recalling the exact mode in which the accident occurred, when the bone is broken in the way I am now describing; but the carpenter, whose tibia alone was broken, gave a very definite account of his accident; his leg was thrown forwards and was doubled under him in consequence of his missing his footing; and he owes the preservation of his fibula to his presence of mind in making no effort to use the limb afterwards.

This, indeed, seems to be a frequent cause of secondary fracture of the fibula; I mean the effort to rise or use the injured member, in ignorance of what has happenened.

Such secondary fracture is very commonly at a distance from the primary fracture of the tibia; that is, at its weakest part, or rather where the force or superincumbent weight may act upon it, at the greatest advantage. Probably, in almost all cases where both bones are broken from indirect force, the tibia gives way first, and then the fibula, because it is incapable, alone, of support or resistance; and this is why we so rarely meet with fractured tibia only; whereas fracture of the fibula alone is very common, as the tibia, though deprived of the support of the smaller bone, is still competent to support the weight of the body. Where a fracture is comminuted, we usually find that the violence has been directly applied to the injured part; but this is by no means invariable. All I mean to affirm is, that direct violence is more likely to produce comminution of a bone than indirect. Compound fracture may be produced in either way; that is, by the broken end of a bone forcing its way through the soft parts in indirect fracture, as is so often seen in the tibia, and exemplified in the last case narrated; or, by such contusion of the superjacent soft parts, that the wound penetrates to the bone. Here let me remark, that there is a very important distinction between a fracture, say of the thigh, with a contused wound on the surface, as in Case 1, and one in which such wound communicates with the broken ends of the bone. It is not that communication between a fracture and the surface is in itself so serious a complication; but that such communication implies, in the thigh especially, the infliction of great violence, and severe contusion of soft parts; and entails usually a tedious suppurative action, which not only retards union by distracting, so to speak, the reparative effort, but also establishes an amount of nervous irritation and exhaustion which it is often difficult to control. The same consequences in kind and even in degree might be expected, with the same amount of contusion, even if the skin alone could escape unbroken. Therefore, compound fracture of the tibia, where the wound is small and the bone can be kept in good position, is by no means so serious a complication as the corresponding injury of the thigh-bone.

The foregoing cases illustrate a fact in reference to fracture of the tibia, which is more easily verified than explained, viz. that when broken obliquely, the line of fracture almost always is directed downwards, forwards, and inwards. I suppose it must arise from the direction in which the determining force usually operates, and from the sustaining power of the fibula before it gives way. However that may be, such certainly is the case in a large majority of instances.

The fracture of a bone is always succeeded by some swelling in the neighbourhood of the injury, and it is generally proportioned to the violence of the injury inflicted. The source of this early swelling is extravasated blood and serous effusion, and this is to be distinguished from that inflammatory effusion which takes place at a later period; the former is inevitable, and innocuous within moderate limits; the latter should be watched suspiciously, and controlled if possible, as it may usher in phlegmon and suppuration even in simple fracture. But early œdematous effusion may be converted into a serious evil by injudicious management. Thus, if a limb be at once tightly swathed in bandages to fix it to a splint, whilst this swelling is going on, the lower part of it may be strangulated, and the patient may not only suffer acutely, but irreparable mischief may be the consequence; I have known gangrene to result from this cause. You will perceive that, in the foregoing cases, my practice is to afford support at once to a fractured thigh, but without the application of any tight bandage. This is essential for the comfort of the patient; it is almost impossible to keep a broken thigh comfortable on a pillow, but an easy position may be obtained in an angular dish splint, or by fixing the limb lightly to the long straight splint on which you mean to keep it. In the latter case little else is needed just at first than a foot bandage and a pelvis strap; after the lapse of forty-eight hours, the limb should be properly rolled and extended. I generally leave the thigh uncovered, as I am not aware of any advantage in carrying the bandage over it, and its exposure facilitates examination of the seat of fracture. The utmost caution must be exercised in fixing the splint, that the ankle and instep do not suffer from the pressure of the splint or bandage. To obviate this I prefer a splint—I speak of the long outside splint—which has a side foot-piece, and I swathe the foot and ankle in a broad band of cotton-wool or wadding, before fixing it. It is of no avail unless the foot be secured very firmly to the splint; and in doing so there is great risk of the injury I speak of, unless this or some such precaution be taken. I prefer having the pelvic and perineal bandages distinct. In fracture of the tibia, the limb may be placed on a pillow or loosely on an outside splint until the early swelling is subsiding.

This leads me to remark upon the principle of treatment to be adopted in fractures of the lower extremity. That which has relaxation of the muscles for its basis is unquestionably the best, wherever it is practicable. Thus, most cases of broken leg will do well on an outside splint, with the knee flexed. But some are not amenable to this mode of dealing with them, as in Case 3, where the tibial fracture was very oblique, and there was general spasm of all the muscles of the leg. I was obliged ultimately to fix the limb to a long outside splint, and make extension as in fracture of the thigh;

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this plan was successful. In the treatment of fractured thigh, it is impracticable to relax one set of muscles without putting another on the stretch; and, therefore, except in some few instances of fracture high up, where the psoas and iliacus muscles tilt the upper fragment forwards, the straight position is the best. It may be naturally asked why, in the case last referred to, I did not practise tenotomy, as in Case 2. It was because I could not charge any one particular muscle with the resistance; the spasm was general, and even more apparent in the anterior muscles of the leg than in the gastrocnemius. This operation is a valuable assistance where it is practised judiciously; you would not, for instance, pass your knife through ecchymosed or inflamed cellular tissue to reach a tendon, if you could avoid it, and you should be very careful afterwards, that your splint does not press upon, and interfere with, the reunion of the severed tendon. The cases in which I have found this little operation a most valuable adjunct, are those in which the tibia is fractured near to the ankle-joint, and there is a consequent tendency to displacement, very like dislocation of the shaft of the tibia forwards.

One word of caution in conclusion respecting the mechanical treatment of these fractures. Inspect them frequently. Do not rest satisfied with having put up a broken limb in a good position. Many circumstances may subsequently mar all you have done, and your deferred examination may expose to your view an irremediably deformed, and, perhaps, useless limb.

Some of the foregoing cases illustrate the importance of not overlooking general treatment in fractures. The employment of sedatives, for example, where there is a tendency to nervous or drunken delirium. In the first case a remarkable degree of physical obtuseness to the shock of the severe injury received, was followed, after an interval, by nervous delirium, quieted speedily by morphia. This is by no means a solitary instance of the sort which has come under my notice; and I have learned to look with suspicion on patients whose nervous system seems insusceptible of shock, incapable of resenting violence offered to it. I have on several occasions known such patients subsequently the subjects of nervous delirium.

In Case 2, gin proved an invaluable ally, where reparative effort was at a standstill. As general causes of non-union, besides lack of power or want of stimulus, a specific poison, such as syphilis, may thus operate. In Case 4, the attacks of gout could not account for the non-union of one bone, when union had been accomplished in the larger and more seriously injured bone. The cause in this case seemed to be local; viz. the interposition of an isolated fragment of bone between the fractured extremities.

The eighth, and last, case which I have narrated, belongs to a class, the importance of which may be fairly estimated by the difficulties which often surround the treatment. Acting with a conscientious desire to avoid mutilation wherever it be practicable, the Surgeon is nevertheless bound, in making such attempt, to weigh carefully the risk to life; and, in so doing, a multitude of elements present themselves for his consideration. It is an easy solution, in such doubt, to resolve the question by amputating; but I need scarcely say that the principle which should guide you, under such circumstances, is to give the patient the advantage of the doubt. In some instances, there can be no hesitation about the imperative necessity of amputating a crushed limb, and then, I think, the sooner it is done, the better; that is, if the patient have sufficiently rallied from the effects of the shock caused by the accident or loss of blood, to enable him to bear the operation. But primary amputation is not always successful, and secondary amputation is not always the reverse; or, in other words, in estimating the reasons for and against immediate sacrifice of a limb, it is to be borne in mind that if you defer the operation, you still have the alternative of amputating at a later period if you deem it necessary. This consideration ought to have its due influence in the decision; and my own opinion of secondary amputation is not so unfavourable but that I should allow considerable weight to the possession of this alternative. In the present case, the age and habits of the patient were against her, and the nature of the injury serious and complicated; but, in her favour, there was good health and a sound constitution. She looked much younger than her avowed age, and she rallied well and readily from the shock of the injury. Further, the wound over the tibia was small. Having carefully weighed these circumstances, I determined to make an effort to save the limb, and to await the development of the case. At first, my hopes seemed likely to be realised, and the patient went on favourably. But, as the sequel proved, deep-seated suppuration and ulceration involved an artery, and all expectation of saving the limb was at once abandoned. Two days elapsed before she would consent to amputation, pressure being kept on the femoral artery, during which time she rallied considerably from the loss of blood. She went through the operation under chloroform, with scarcely any hæmorrhage or apparent depression, and promised to do well, as she now took plenty of nourishment. Yet, the inactivity of the stump indicated that the constitution had sustained an irreparable shock from the sudden and large drain of the vascular system, and she sank from pure exhaustion I need scarcely say that it would have been idle to have attempted to seek for the bleeding vessel to tie it, under the above circumstances. On examination of the body, there was no indicaiion of disease in any organ, but general anæmia confirmed the supposition that the patient died from loss of blood.

The child who forms the subject of Case 7, presents some remarkable features of precocious development, accompanying an ill-developed state of the osseous system, which has rendered her obnoxious to repeated fractures: at the age of 9 she possesses the mammary development of puberty, and there is some growth of hair on the pubes. The expression of her face exhibits a singular mixture of the woman and the child. Her intelligence is moderate, and she is quiet and tractable. Her mother tells me she has been subject to irregular periodical discharge, similar in appearance to the menstrual discharge, since infancy; and that this makes its appearance whenever she is much excited or disturbed. She has no indication of scrofula, unless the fragile state of her bones be considered such: but I apprehend this depends upon some deviation from the healthy qualitative developement of the bone, a disease of organization which belongs to the atrophic class. Her general health seems good.

Another case of abnormal development which I have just admitted, belongs to that large category, in which the growth of the symmetrical halves of the body stops short of actual union; and it is the most distressing form in which this arrested development presents itself, consistently with the perpetuation of life. The abdominal parietes below the umbilicus are incomplete; an interval of nearly an inch separates the ossa pubis; the anterior wall of the bladder is deficient, and the mucous surface of its posterior wall, of a bright red hue, is exposed and everted; the upper wall of the urethra is also absent, and the penis retracted; but there is a cutaneous bridge stretching across the pubic region between the everted bladder and partial urethra. The urine may be distinctly seen distilling from the orifices of the ureters. I have no intention of doing anything further than to supply this boy, who is about fourteen years old, with a receptacle for his urine which he may wear,—an external bladder in place of that with which Nature has left him unprovided.

ORIGINAL COMMUNICATIONS.

ON THE MEANS FOR

PREVENTING CARIES OF THE PETROUS BONE AND THE FORMATION OF ABSCESS IN THE BRAIN,

IN CASES OF

DISEASE WITHIN THE EAR.

By JOSEPH TOYNBEE, F.R.S.

Aural Surgeon to St. Mary's Hospital, to the Asylum for the Deaf and Dumb, etc.

I MAY, perhaps, be permitted to add a few remarks to the highly interesting observations published in your Journal of February 23, on Abscess in the Brain, associated with discharge from the ear.

In order that we may ascertain the causes which lead various affections of the ear to produce disease in the brain, it is desirable that the ear be always carefully dissected, so

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that the nature of the affection its exact locality, and its relations to the petrous bone and surrounding structures, be clearly pointed out. Your reporter states that "it is a very tedious process to take out the temporal bone for careful examination;" inasmuch as a section with a saw in front of the petrous bone as far as the body of the sphenoid, and one behind, as far as the basilar process, followed by the division of the soft parts by a large scalpel, is all that is required to remove the parts necessary for an examination of the ear, the process of removal can scarcely be considered "tedious." The subsequent dissection of the ear doubtless requires some care; it can be best effected by means of a small pair of cutting forceps, whereby piece by piece of the petrous bone is cut away, and no saw-dust produced, with which the state of the parts is apt to be marked when the saw is used. I have no hesitation in saying that the breaking up of a petrous bone by the aid of a chisel and hammer, can lead to no useful results; indeed, the bone must be taken away in order that a careful and searching dissection may be made. Some recent observations on the mode in which molluscous tumours developed in the external meatus, progress inwards through the petrous bone to the brain and its membranes, tend to confirm the opinion I have advanced on several previous occasions, that in all cases of diseased petrous bone and brain, the nature of the disease, the particular part of the ear affected, and its relations to the brain and its membranes, must be ascertained. Of course it is desirable that the blood-vessels and other parts adjacent to the petrous bone be also examined. Before taking leave of this part of the subject, I may add, that if any Medical man, who is too much occupied to conduct a careful dissection of a diseased petrous bone that may fall under his notice, will send it to me, I shall be happy to make a dissection, and will return the specimen, with notes.

The recent occurrence of a case in private, and one in Hospital practice, in which the brain suffered from disease of the ear, induces me to make some observations on the treatment of similar cases. There can be no doubt that the usual cause of disease in the ear advancing to the brain is, that matter is pent up in one of the cavities of the ear. I have ventured to suggest that when pent up in the tympanum it affects the cerebrum; when pent up in the mastoid cells it affects the cerebellum; and when in the vestibule it affects the pons varolii, and base of the brain. Since I promulgated this opinion, some years since, in a paper in the *Medico-Chirurgical Transactions*, I have had no reason to alter my opinion. If it be a correct view,—that matter, pent up in a cavity of the ear, is the usual cause of disease of the petrous bone and brain, it follows that the duty of the Surgeon is to prevent the matter from collecting, or to remove it when collected, and if neither measure can be effected, to diminish by every possible means the effect of the matter, and to prevent the progress of the disease towards the brain. The most simple and most manageable cases are those in which the tympanum is the seat of the disease, and where the whole, or a considerable portion of the membrana tympani has been destroyed; the use of a syringe and warm water twice daily is then usually sufficient to ensure the removal of the discharge; but it must be laid down as a rule that so long as there is any discharge from an ear, so long must the syringe be used, inasmuch as discharge is apt to become more or less solid, and thus act as a barrier to its own escape, and to that secreted around it. While the discharge is being removed, of course the thickened state of the tympanic mucous membrane, which gives rise to the discharge, is to be treated locally and generally, so that, its condition being ameliorated, it may no longer pour out the unnatural discharge, and thus all fear of disease in the petrous bone may be removed. I have met with several cases in which death occurred from diseased brain where there was no other impediment to the free escape of discharge than the inspissated secretion itself, and where the free use of the syringe would have averted the mischief to the bone and the brain. In cases where the orifice in the membrana tympani is small, and where, in consequence, the discharge is apt to be detained by the remaining portion of the membrane, acting as a barrier, additional care is required by directing the stream of water through the orifice of the membrane into the tympanum, in order to evacuate the latter cavity of its contents.

The last and most serious consideration is how to avert mischief to the bone when there is evidence that matter is confined in the tympanum or mastoid cells without any outlet. The two classes of cases may be placed together, inasmuch as when there is long-standing irritation of the tympanic mucous membrane, an operation on the drum in order to establish a permanent orifice in it, must not be attempted, as inflammation of the dura mater may be induced. If the membrana tympani be absent and matter is confined in the mastoid cells, it is desirable by means of a curved probe to endeavour to make an exit for the matter through the natural channel into the tympanum, and to use the syringe with warm water cautiously; by this means it is possible in some cases where the mucous membrane of the tympanum is not very thick, to secure the withdrawal of matter from the mastoid cells; but, unfortunately, the general rule is, that the matter cannot be reached and released by the above means, for it is held in bony cells where communication with the tympanum has been cut off by the thickening of the mucous membrane lining those cells. Supposing, then, that there is matter in the tympanum or mastoid cells which is causing irritation of the bone, and implicating the brain or its membranes, and that the performance of an operation for giving an outlet for the matter is not to be attempted, what treatment can be adopted with a hope of benefit? My own experience points to an issue or a seton as a remedy calculated to be of the highest service. One patient whose case is cited at length in my work "On the Diseases of the Ear," whom I saw some years since in consultation with Professor Miller, of Edinburgh, who had unmistakeable symptoms of matter in the mastoid cells, attended by attacks of giddiness, insensibility, and intense pain in the head, was perfectly cured by the use of a seton, when all other remedies had been tried. In what way the seton acts I cannot indicate, but I have seen several cases, and one very recently, of excessive severity, in consultation with Mr. Holman, of America-square, where the formation of an abscess outside the ear, there being no orifice in the bone and no dead bone detectable, gave relief to most urgent symptoms produced by the presence of matter within the mastoid cells. Two other cases of the same character are now under treatment. The insidious progress of cases, in which matter in the cavities of the ear injures the petrous bone and the brain, cannot be too often or too forcibly impressed upon the minds of the Profession. Medical officers to Insurance Companies seem to be aware of the danger liable to follow long-continued discharge from the ear, but judging from cases constantly brought before my notice, as a rule, these cases are too apt to be disregarded, until fatal symptoms supervene. The recent death of a young officer, who distinguished himself in the Crimean war and Indian mutiny, may be cited in illustration of my observations on this subject. I will give a brief outline of the case:—

Captain R. B., aged 25, was brought to me by Mr. Teevan on January 2, of the present year. He stated that when a child he suffered from some infantile disease, which was followed by discharge from the left ear. This discharge continued, with slight intermissions, until I saw him, and it was accompanied by pain in and around the ear. Irritation within the ear, as is not uncommon, produced a polypus in the external meatus; on account of this polypus Surgeons were consulted, and the growth was removed on one or two occasions. The irritation, however, increased, and while at Aldershott, at the end of the year 1860, it became so severe as to induce him to come to London to seek further advice. At the first visit, although the patient walked into my room, and did not feel himself seriously ill, I felt convinced that the petrous bone was diseased, and that there was disease in the cerebrum. There was a polypus in the meatus; the bone was tender all around the ear; there was great pain in the ear, which extended deeply towards the brain. I expressed my fears to Mr. Teevan of the very dangerous character of the disease, and stated my belief that there was an abscess in the cerebrum. In spite of all treatment, the head symptoms increased; the portio dura became paralysed, and the patient also lost the power of articulation, although he was perfectly sensible. Dr. Watson, at a consultation a few days before the patient's death, confirmed my opinion of the probable existence of an abscess in the brain, but as the friends objected to a post-mortem examination the verification of the opinion could not be made. At least there can be no doubt, and there was no doubt in the minds of his Medical attendants, that the patient died from injury to the brain produced by long-standing disease in the ear; and to

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me it is highly probable that if, in early life, the disease in the ear had been perseveringly combated, its fatal results might have been averted.

CYSTIC TUMOUR OF THE ORBIT

CONNECTED WITH DISEASE OF THE ORBITAL PLATE OF THE FRONTAL BONE, COMMUNICATING WITH THE FRONTAL SINUS.

By JOHN WYATT,
Surgeon, Coldstream Guards.

EDWARD S., aged 23, a strong but unhealthy-looking soldier of the 2nd Battalion Coldstream Guards, was admitted into the Regimental Hospital on January 26, 1860, for a tumour over the left upper eyelid, which had been gradually appearing for six weeks, and without any assignable cause. It had the appearance of a firm, tense, and elastic tumour, with a prominent apex on the surface, but the base was undefined, and projected backwards deeply into the orbit above the globe. Four days after admission into Hospital an incision was made over the apex, on a line with the tarsal cartilage, and as it was impossible to dissect it out entire from the orbit, it was punctured, and a quantity of a glairy, semi-purulent fluid escaped freely.

The anterior portion of the cyst, which was densely bound down by the ocular fascia, was removed, and the finger passed freely beneath the orbital plate of the frontal bone, which was denuded of periosteum, and the bone roughened; the probe passed easily in a direction upwards, and immediately more purulent matter oozed out. Water-dressing was applied afterwards. Four days after the operation the cellular tissue of the eyelid was œdematous and red, approaching active erythema.

February 22.—The eyelid has quite recovered itself, and the discharge is now of a glairy, thin character.

Liq. nasturtii, ʒj.; syrup ferri. iodid. ʒss.; mist. camph. ʒjss. twice a-day.

28th.—The wound has shrunk considerably in size, but there is still an oozing of a thin secretion.

April 9.—The man now suffered from an acute attack of pleurisy, on account of which he was detained in Hospital for six weeks, and was dismissed to duty on May 30, the wound still not healed, but nearly so.

February 14, 1861.—To-day the man was sent for, to be examined as to the condition of the eyelid. There is a cicatrisation of the skin 1½ inches long; but although there is a slight falling down of the upper lid, there has not been sufficient adhesion to the ocular fascia and muscle to prevent almost complete elevation of the upper lid.

The man states that for sixteen weeks there was an almost constant oozing of thin matter from the wound to the extent sometimes of only a few drops. The wound is now quite healed.

I believe that the foregoing is an instance of a rare disease, and one that does not often present itself to Surgeons connected with Ophthalmic Institutions; for Mr. Bowman, to whom I related the circumstances of the case when it first came under my notice, stated that he had seen but few similar, although, from the description with which I furnished him, he was able to diagnose, without seeing the patient, what it would be likely to turn out; and believing that it is a duty incumbent on all Surgeons to bring to the notice of the Profession any case which may present features of interest, I have ventured to intrude this in your Journal.

UNIVERSITY EDUCATION.—There are 806 Students of Medicine and Surgery attending Lectures and Hospitals in Dublin this winter; 1237 Students in London; and 1156 in Paris—being a larger number than is usual in all three capitals. The Students of Medicine in Dublin, 1860—61, are divided among the various Schools as follows:—The Ledwich School, 228; College of Surgeons' School, 220; Cecilia-street School, 101; Trinity College School, 100; Richmond Hospital School, 97; Steevens' Hospital School, 60: total 806. Of the 100 Students attending the Trinity College School, 80 are Graduates or Undergraduates in Arts.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

CONDUCTED BY

JONATHAN HUTCHINSON,
Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital,

AND BY

J. HUGHLINGS JACKSON, M.D.

THE ROYAL LONDON OPHTHALMIC HOSPITAL.

ACUTE GLAUCOMA OF THE RIGHT EYE—IRIDECTOMY—ACUTE GLAUCOMA IN THE LEFT EYE TWENTY-FIVE DAYS LATER—IRIDECTOMY—RESTORATION OF PERFECT SIGHT IN BOTH EYES.

(Under the care of Mr. DIXON.)

Mrs. P., aged 46, a widow, who had gained her livelihood as a tailoress, was admitted on December 27, the twelfth day of an attack of acute glaucoma in her right eye. She was a thin woman, moderately florid, and had never suffered from either rheumatism or gout. The attack had, she said, commenced suddenly by severe pain, which kept her awake all night. In the morning she found that she could scarcely see at all with the affected eye. From that time to the date of her application at the Hospital, the pain in the globe and circum-orbital region was persistent and severe. The other eye remained quite well. Various applications—blisters, etc.—had been used, but without benefit.

When admitted, Mrs. P. could but just distinguish light from darkness with the affected eye, and was quite unable to count fingers held between the eye and the light. The globe presented the usual conditions of glaucoma. The sclerotic was leaden and dusky, and crossed by enlarged veins; the pupil was moderately dilated and fixed; the fundus looked yellow and dull, although there was no opacity of the lens. The surface of the cornea was uneven, and reflected images very imperfectly. The globe was much harder than the other. Under the influence of atropine the pupil of the affected eye did not dilate at all, whilst that of the healthy one did so until double the morbid size of its fellow. The surface of the cornea was almost without sensation. With the ophthalmoscope it was impossible to illuminate the fundus; only a general dull red reflex could be obtained, the appearance being as if one looked into semi-opaque red jelly. Mr. Dixon advised the immediate performance of iridectomy; but the woman refused to come in, on account of domestic arrangements. On December 31, the fourteenth day of the attack, she was admitted, and the operation performed.

The Operation consisted in making an incision into the upper part of the cornea, close to the sclerotic, but in front of the iris, and then withdrawing and cutting away a portion of iris about a quarter of an inch in width. The incision was made almost directly upwards. Chloroform was not given. No irritation followed the iridectomy, and the pain, which had been continuous before, was at once wholly relieved.

On January 3 (fourth day), the note states: "The brilliancy of the corneal surface has been wholly restored, and it now reflects images perfectly. She has no pain whatever, and can read No. 10 of Jaëger's test-type." A minute fistula remained in the corneal wound, to which Mr. Dixon applied the nitrate of silver. She suffered somewhat from headache, and an aperient was ordered. After this her progress as regards the right eye was uninterrupted, and she soon became able to read small type.

On January 25 the left eye was suddenly attacked. The attack began by severe pain in the globe, and was followed by vomiting. Mr. Dixon saw her on the 28th, and then found the left globe in a precisely similar state to that in which the other had at first been. The fundus could not be illuminated with the ophthalmoscope. She was all but blind, and could only just distinguish fingers held between the eye and the light. The pupil was dilated, oval, and fixed. The pain had been persistent and severe. Mr. Dixon at once

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performed iridectomy, the steps of the operation being exactly similar to those in the previous instance.

It would be tedious to mention in detail the course of improvement in the second eye. It was uninterrupted. At the present date the woman has two almost perfect eyes. In both the tension is normal, and both are free from pain. She can read with either, and with the left she can see to read Jaëger's No. 2 ("pearl") without the aid of a glass. More than two months have elapsed since the first operation, and about six weeks since the second. Both eyes present the defect of coloboma vertically upwards, but in neither is this condition the cause of the slightest inconvenience.

In commenting upon this case, Mr. Dixon remarked that the disease had been of the exact form to the relief of which iridectomy is best suited. It was *acute* glaucoma. In the chronic cases, as far as he had seen, little or no benefit accrued, while not unfrequently the operation was followed by increase of irritation. The attack of glaucoma in the second eye while the patient was in the Hospital, and while the other was progressiug as satisfactorily as possible, was a fact of much interest. It was well to note that this attack was not induced by ophthalmoscopic examinations, for none had been made. If they had, no doubt they would have had the credit of inducing the disease. The occurrence of glaucoma in the second eye a few weeks after the first, was quite in accordance with what is frequently observed; and the fact that both eyes usually suffer, is one which greatly increases the value of iridectomy as a successful means of treatment.

METROPOLITAN FREE HOSPITAL.

CANCER OF THE TONGUE—RAPID PROGRESS—DEATH WITHIN SEVEN MONTHS—CANCER IN THE LUNGS.

(Under the care of Mr. HUTCHINSON.)

The following case is of value on account of its affording an additional instance of the production in the lungs of secondary deposits of epithelial cancer,—an event of which, as yet, only about eight or ten examples are on record. These cases prove the essential identity of the epithelial form with the other varieties of cancer. It will be observed, also, that the progress of the disease was extremely rapid. Even medullary cancer, which is well recognised as the most acute form of malignant disease, but rarely kills within seven months of the first symptoms.

Mary W., aged *55*, was admitted under my own care, on August 3, 1860, for cancer of the tongue, and secondary enlargement of the glands in the neck. The tongue was much swollen and livid, very hard and very little moveable. On looking into the mouth no ulceration could be seen, but on turning up the edge of the tongue, an excavated ulcer was found on the left side. In the upper part of the left side of the neck was a mass of enlarged glands, in some parts hard, and in others softening. One had been punctured, and had discharged a bloody fluid. The disease of the glands had then existed five months, and it was difficult to ascertain how long the affection of the tongue had preceded the enlargement of the glands. She had observed the enlargements almost as soon as she found her tongue painful. She was much emaciated, and looked very ill. Opiates were given to relieve the pain, which was severe. The glands soon afterwards ulcerated, and at length the ulcerative process passed deeply into the upper part of the neck, and opened into her mouth. She could only take liquid food, and by far the greater part of this ran out of the mouth through the ulcerated opening. She became very thin, and sank rapidly from pain and exhaustion. Death took place on October 10, about seven months from the date she gave as the commencement of the disease.

At the autopsy, the side of the tongue, the palate, and structures of the neck generally, were found involved in a large cancerous ulcer. Portions of diseased tissue cut from the tongue showed the usual elements of epithelial cancer, there being abundance of epithelial and blood cells. The adjacent glands of the neck were similarly diseased. On examining the contents of the thorax, one of the bronchial glands was found enlarged to the size of a small walnut. It yielded a white creamy juice on section, and in this juice the microscope showed exactly the same cell forms as existed in the diseased part of the tongue. Scattered in the upper lobe of both lungs were several small masses of white deposit, which infiltrated the the lung tissue, and on section yielded a creamy juice. The largest of these was not bigger than the half of a hazel-nut, and the smallest were about the size of small peas. In three of these which were examined by the microscope, abundant cell structures characteristic of epithelial cancer were seen. In a fourth, and one of the largest, only disintegrated lung tissue with cells like those common in inflammatory effusions, were found. The cancerous masses yielded abundance of the compound or nested cells, and also numerous flat epithelial scales: none of the latter were of large size. There were also present numerous free nuclei. The appended woodcut is from a drawing made by the

Epithelial structures (cancerous) from secondary deposits in the lung.

camera by Mr. Lens Aldous. All the other viscera of the body were carefully examined, but no other deposits were found except those above described.

GUY'S HOSPITAL.

UNUNITED FRACTURE OF THE FEMUR OF TEN YEARS' STANDING — GREAT SHORTENING — CLINICAL REMARKS BY MR. HILTON.

(Under the care of Mr. HILTON.)

[Reported by Mr. FREDERICK MEGGY.]

We give the following case, with Mr. Hilton's remarks, gathered from a clinical lecture delivered at Guy's Hospital:—

William C., aged 27, was admitted December *15*, 1860, for ununited fracture of the femur. He was a farm-labourer, robust and muscular. Ten years ago, while attending to a horse and cart, the horse took fright, ran off, and threw him down. The wheel of the cart passed over the upper third of his right thigh. He was carried home, and next day a straight outside splint coming just up to the trochanter, was put on. In reference to this Mr. Hilton remarked, that it was impossible with such a splint to keep the ends of the fractured bone in apposition. He could not say that ununited fracture followed generally from want of proper adaptation; but in the present case, he thought it probable. The splint was not touched for twelve weeks, except that as the bandage cut into the upper part of his thigh one or two turns of it, just opposite the fracture, were cut open. At the end of the

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twelfth week the splint was taken off. The man said that before one day was over the leg began to shorten. The same splint was, therefore, re-applied A fortnight later he was taken to an Infirmary in the country, where the splint was taken off; great extension was used and a long splint reaching up to the axilla was put on. This treatment, Mr. Hilton remarked, ought to have been adopted at first; but after twelve weeks the probability of success would be, as it turned out, very small; for on taking off the splints it was found that the leg shortened again at once. From that time he has gone about on crutches.

December 16.—On examining the thigh the great trochanter on the injured side cannot be felt. The end of the upper piece of the fracture is at a distance of six inches from the anterior superior spinous process of the ilium, when the limb is at rest. It is just below the skin. The lower end is very high up, and deeply situated. The measurements of the limb are as follows:—From the anterior superior spinous process of the ilium to the upper edge of the patella, twelve and a-half inches; the same measurements in the uninjured side being seventeen inches. To the inner malleolus, in the injured leg, twenty-seven and a-half inches, while on the other side it was thirty-three inches.

Mr. Hilton remarked, that although he considered that nothing was worse in Surgery than to be constantly disturbing a fracture, yet to keep a fracture covered up twelve weeks, so that it was impossible to know how it was going on, was an error quite as great. He believed that the Surgeon should be able to look at the fracture without disturbing the apparatus every three or four days, at all events, early in the treatment. Acting on this principle he had all cases of fracture under his care so put up that not a bit of bandage or plaister could obscure his view of the seat of the injury, so that by simply turning down the bed-clothes, he could put his finger upon the part, and see how the process was going on. If this principle had been acted on by the gentlemen, under whose care the patient came at first, they must have found out that the case was doing badly, and could not have helped seeing that their treatment was inefficient. At the end of twelve weeks, as seen above in the history of the case, the most exact adaptation would fail, for then the ends of the bone would be covered over by a thick pellet of bone, which would not tend to unite so well as the recently fractured ends.

William C. had heard of a case of ununited fracture which Mr. Hilton had under his care in the summer, and the success attending the treatment of which case led the poor fellow to hope that he, too, might be cured. In that case, however, the fracture was of the tibia. The ends of the bones were kept constantly displaced, and were moving one upon another. The parts had never been seen for several weeks after the injury, until the whole of the apparatus was taken off, and then it was found that the fracture was ununited. In that case Mr. Hilton was obliged to divide one or two tendons, and ultimately to break up the medium of union between the ends of the fractured bone and then fasten them together by two pegs of ivory. Mr. Hilton said that if, in this case, he had put in the peg and had not divided the tendons, he should not have succeeded in procuring union. To use his own words,—"I found that the tendo Achillis and the tendon of the tibialis anticus were opposed to my views; but by cutting them across there was an end to this obstruction, and I so far became master of the parts." This case did very well. In William C.'s case, however, Mr. Hilton did not think it advisable to perform an operation. In reference to this part of the subject he said:—"The ends of the bone are closed up by new osseous matter, and they are now four or five inches apart. The upper end projects about four inches below Poupart's ligament, and the lower projects behind the tuberosity of the tibia. To succeed in this case, we must make such an incision as would create an enormous gap, and, assuming that to be done, we should next be obliged, in order to have a fresh surface, to cut off the ends of the bones. I do not believe it would be possible, even then, to keep the fractured ends in actual position. It might be remarked, that if this had been done earlier there would have been no difficulty in attaining our object; but see how the circumstances are changed. The psoas iliacus and pectineus muscles have had full power over the upper fragment for nearly ten years, tilting it forwards, and no force that we can employ will keep it down. On the other hand, the muscles at the back of the thigh are strong, full, and vigorous, and these draw the lower fragment upwards and backwards. If, therefore, the operation of cutting off the ends of the bone were safely accomplished, there is no probability that we could ensure their apposition, without which the operation would be useless."

By means of an apparatus made by Mr. Millikin, Instrument-maker to the Hospital, he was enable to get about without his crutches. The apparatus was composed of a firm case, enclosing the thigh, and was provided with a seat from which extended steel supports, stretching down the leg and attached to the boot. The whole was secured by straps, so arranged that the weight of the body was borne by the apparatus, while progression was not in the least interfered with.

Mr. Millikin has now made three similar apparatus for different patients, and in each case has been perfectly successful.

ACUTE GLOSSITIS (MERCURIAL?).

(Under the care of Mr. HILTON.)

Emily D., a charwoman, unmarried, aged 30, was admitted under Mr. Hilton's care on February 5, 1861. She had had good health until about three months before admission, when she first noticed a swelling below the lower jaw on the left side. It was then very hard and very painful. It increased, and she then became an out-patient, under the care of Mr. Poland. Mr. Poland prescribed cod-liver oil and some ointment, to be rubbed into the swelling. After attending for some time, and finding that the swelling was rather increasing in size, and as her general health was somewhat impaired, she was treated by a Surgeon at home. She was given some white powders, of which she took one every three hours. She had also some white mixture. After taking the powders for three days, her gums became sore, and her tongue began to swell. The lump under the jaw, however, disappeared, but the swelling of the tongue gradually increased.

On admission she looked the picture of misery. She sat with her head bent forwards, resting on her hands and knees, and half of her swollen tongue projecting out of her mouth, two inches beyond her mouth, and, on account of its being very much swollen, it was much indented by the front teeth. The saliva ran out of her mouth in large quantities, and there was an intense (mercurial?) fetor. She had profuse perspiration, headache, her bowels were confined, and she could not take any food.

To remedy the pressure of the teeth upon the tongue two wedges of wood were introduced between the upper and lower molars, and were tied round with tape, so as to prevent them falling down her throat. (Two days later, however, one of them slipped, and fell back into the pharynx, and nearly choked her. A hole was, therefore, bored through the pieces of wood, and a piece of string was passed through the holes.) She was directed to lie on her back, so that the swollen part of the tongue might be as high as possible. In order to facilitate the return of venous blood to the end of the tongue by gravitation, poppy fomentation was ordered for the face, and three grains of Dover's powder were given every four hours. Beef-tea, arrowroot, a pint of beer, and eight ounces of wine were given daily.

The swelling of the tongue went down rapidly. On the 16th it had quite gone back into her mouth. There was still, however, much ulceration of the inside of the mouth, for which she was directed to take ten grains of chlorate of potash in an infusion of quassia three times a-day. This also disappeared, and she was soon afterwards discharged well. It is worthy of remark, that the glandular (?) swelling subsided under the use of the mercury.

STRICTURE OF THE URETHRA—RETENTION OF URINE—PUNCTURE OF THE BLADDER BY THE RECTUM.

(Under the care of Mr. HILTON.)

Joseph A., aged 20, was admitted into Luke's ward on January 23, 1861, for retention of urine. The history was that five years before he had contracted gonorrhœa. He took copaiba, but did not use injections. Seven or eight months after he supposed that he had been cured, he noticed that the stream of his urine was becoming smaller, and was forked. Four months later he had an attack of retention, coming on after walking a great distance. This attack was relieved in

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about twelve hours by medicines. He had subsequently several attacks, which were also relieved by medicine. The stream of water was gradually getting smaller. About nine weeks ago he had a severe attack of retention. He was at first treated by opium, but this failing, an attempt was made to introduce an instrument. The patient lost a large quantity of blood, but the attempt was not successful. The opium was then repeated, and further attempts made to pass an instrument, but without avail. He was, therefore, sent to the Hospital. He had then had retention eighteen hours. He was put in a warm bath, and opium was given. A catheter was introduced into the urethra, but on account of the bleeding, was not passed into the bladder. No good effect being produced by the baths and the opium, Mr. Charlton, who was then House-Surgeon, punctured the bladder by the rectum, and drew off about a quart of urine. After five days he was able to pass urine in a good stream by the urethra. The canula was then withdrawn. After a few days it was again attempted to pass a catheter, but the attempt was not persisted in, on account of a recurrence of the hæmorrhage. He was, therefore soon after discharged, without having had an instrument passed.

January 23.—He applied again, having had retention for five or six hours. He was put in a warm bath, and forty drops of laudanum were given, by which his symptoms were speedily relieved.

24th.—Mr. Hilton ordered him to take three grains of grey powder, with five of Dover's powder, three times a-day.

30th.—An attempt was made to pass a catheter, but it was not successful.

February 8.—Mr. Hilton passed a caustic bougie down to the seat of the stricture and left it there for about twenty minutes. The effect of this was that he passed water much more freely, with less pain, and in a larger stream.

The dresser succeeded on February 11 in passing a No. 1 catheter which was left in a few hours. On the 14th No. 4 was passed and was left in three days, when No. 7 was passed, and at the date of this report (February 22) No. 9 had been passed, and had been kept in the bladder.

Mr. Hilton remarked that this case exemplified several interesting features in the clinical history of strictures. On relieving the bladder by puncture through the rectum, and thus for a time taking all duty from the strictured urethra, the parts relaxed, and in a short time the urine could pass with comparative facility by the natural channel. When the canula was withdrawn the symptoms recurred, and finally complete retention ensued. It was again impossible to relieve the bladder by the catheter. Grey powder and Dover's powder were given,—the first to absorb any deposit, and the second to relieve the spasm which was temporarily superinduced in the organic stricture. The next means adopted was to pass down to the stricture a bougie armed with nitrate of silver, with the object of reducing its irritability. By these means it was found possible to pass gradually Nos. 1, 4, and ultimately No. 9. Mr. Hilton remarked also that when used to relieve the bladder, the trocar and canula should be kept in the bladder until it becomes practicable to pass an instrument by the urethra. In this case the canula was kept in only five days. Of course this rule was not an absolute one, and would depend on the time in which the reduction of the stricture was accomplished. The canula might be kept in three weeks, or even longer.

Lord Stanley, Colonel Durand, and Dr. Gibson, have been appointed Commissioners to inquire into and report upon the measures which it may be expedient to take for maintaining and improving the health of all ranks of Her Majesty's army serving in India.

Royal Medical Benevolent College, Epsom.—Scarlet fever having broken out at this establishment, Dr. Aldis, Medical Officer of Health for St. George's, Hanover-square, accompanied the Visiting Committee by request on a sanitary inspection on Tuesday last. The disease is of a mild character, and no fatal case has occurred under the care of Mr. Stillwell, and the judicious arrangements of the Managers. But as the present schoolroom is quite inadequate for the requirements of the scholars, it is hoped that another of larger cubic capacity and better ventilated will be erected as soon as the funds will permit.

Medical Times and Gazette.

SATURDAY, MARCH 16.

ONE FACULTY AT LAST.

For many years the cry of Medical Reformers has been for one Faculty and self-government by representative institutions. Twenty years ago, at least, vigorous efforts were made to establish these by an organisation of the General Practitioners. The movement ended in a compromise, and the Medical Act was the result. The disturbances of social position caused by the operation of that measure have led to a lull in the Reform agitation, but it has aggravated the evils of variety of titles and qualifications by virtually increasing them. The consequence is a large increase in the petty jealousies, already too common, between rival Practitioners, and the interruption of much professional good feeling. Nor is this all. A great majority of the Profession feel that they have been heavily taxed for no substantial good, other than an authentic record of professional qualifications. To this end each member has, however, been compelled to pay £2 to be registered, or in default submit to be virtually deprived of his municipal and professional rights. Many, in addition, have been under the necessity of seeking another qualification, either for the purpose of competing in titles with a professional rival, or of legally qualifying for departments of public or private practice for which the operation of the Act disqualified them. Nor can the great body of the Profession see where this will end; for some new change in the plans of the Colleges may compel them to expend additional cash on a new title or qualification in this hot competition for handles to professional names. At the same time, they feel utterly powerless over the main movers in these expensive changes.

One of this class of changes has recently occurred in regard to Surgeons and the practice of Surgery, the tendency of which is likely to be in the other direction, by establishing the Profession academically on the basis of one Faculty. The Scottish Universities' Commissioners, by a recent "ordinance," have directed the University of Edinburgh to confer the degree of "Master of Surgery" with the M.B. degree. The Scottish Colleges appealed to the Privy Council against it; but after a full hearing of both sides, the ordinance was confirmed. Surgery has thus for the first time been deliberately assigned an academic rank. This must be considered a very important step; for the example of Edinburgh will doubtless be followed by the English Universities of Oxford and Cambridge, both which are equally anxious to revive and develope their Faculties of Medicine. Indeed, Cambridge has already discovered that she has, and has exercised, the power of licensing in Surgery. We may therefore conclude that, ere long, the English and Scottish Universities will send forth men legally qualified to practise both Medicine and Surgery. In other words, the opportunity of undergoing academic training and attaining academic honours, is virtually open to the General Practitioner: and that at little more expense, if so much, as is incurred for the licences of the Medical Corporations.

In a Medico-political point of view, the most important result is the general establishment of the "one Faculty" system. On the part of the University of Edinburgh, this is nothing new. For many years past her graduates have been examined in every department of Medicine, so that the M.D. of Edinburgh corresponded rather to the "Doctor of Medicine, Surgery, and Midwifery" of the German Universities than the more restricted "Doctor of Medicine" of Oxford, Cambridge, and Dublin, which considered the term Medicine to

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indicate a special department of Medical science and art, rather than the entire field. Hence Edinburgh graduates are to be found occupying both the special field of the "pure" Physician and the wider field of the "general" Practitioner. At the moment of graduation all the Doctors are equal as to academic rank; but from that moment the disturbing influences of greater industry, higher intellectual powers, command of capital, and the help of influential friends come into play, and the social inequality seen in the ranks of the Profession, which no legislation can alter, is developed.

Now, as opposed to this one Faculty system, we have that of the corporations, which divides the Profession into classes distinct from each other, and subdivides these again into higher and lower. Thus we have corporations which gather together Physicians as distinct from Surgeons, and Apothecaries as distinct from either. Then of Physicians there are three collegiate ranks, Fellows, Members, and Licentiates; of Surgeons two, Fellows and Members. Since the passing of the Medical Act, the worst evils of specialism have been enormously developed by the College of Surgeons of England, which, not content with giving a Special Licence in Midwifery, has also given a Special Licence to Dentists, and has thus admitted to our body those whose connexion with the Medical Profession is of the most remote and flimsy nature. The Licentiates in Medicine and Pharmacy, termed Apothecaries, cannot be made hierarchical as to Professional rank and attainments, so "the Hall" falls back upon the depth of the breeches pockets of the candidates, and requires half as much more for the licence to practise Medicine and Pharmacy in London than for the country licence.

There has been no greater curse to the Profession than this division and subdivision of its ranks. The humble curate may, through the inequality of fortune, be in a lower social position than his rector or bishop, but he has the satisfaction to know that he is equally a clergyman. Not so in the working ranks of the Profession. A Surgeon-Apothecary may have manifested his superior attainments by his researches and labours; but the hierarchical "Fellow" of a College may look down upon him with a self-satisfied sense of superiority, however useless he is and has been to Medical Art and Science. No one can deny that many in the higher collegiate ranks are men of distinguished ability, and that their ability has won them the rank they hold. But the fact does not counterbalance the other damning fact, that in the same rank are pretentious men of the most inferior attainments.

Now, the University party allege that it was in pursuance of these divisive and injurious principles that the Colleges united in an attack upon the ordinance of the Scottish Universities' Commissioners. Their object was to keep up that hierarchical division and subdivision of Medical Practitioners which the One Faculty system wholly repels.

When the Profession was in the first stage of its development, the shop Apothecary and the Barber-Surgeon were handicraftsmen subservient to the Physician—the General Practitioner of the day. But since the time of John Hunter at least, Surgery has burst its swaddling-clothes, and is now so eminently scientific that there can be no good Surgeon who is not well up in both the principles and practice of Medicine and the laws of Life. He is a philosophical and practical Physician, with the head to plan and the hand to execute surgically. In like manner, the old Apothecary exists no longer: he is now the educated Physician with a practical knowledge of the composition and uses of drugs. The supporters of the Academic party believe that the Universities, in their new and wider sphere, will co-operate at least on equal terms with the respective Colleges, in a fostering care of these two departments of Medicine, while, at the same time, they will give that unity of education and training to professional candidates which, by their very nature and constitution, the Colleges are restricted from giving, and which they can only attempt by the lame and harassing expedient of double curricula and examinations. The Corporation party reply that the duties of the Universities and of the Corporations are entirely distinct: the Universities are to teach, the Corporations to license. The Corporations are checks on the corruption or inefficiency of the Universities. The Corporations test the education which the Universities sell. They protect themselves from unworthy *confrères*, and the public from incompetent Practitioners.

Perhaps both parties will in the end be driven by the difficulties of the position to the principle of Lord Elcho's Bill, and make a Government Board the only one which can give a licence to practise. Let every Member of the Profession enter it by this One Portal, and then obtain in addition any degree, diploma, or licence he may think necessary to secure his public and Professional position. "Medicus," or "Doctor," or "M.D.," or some such title, should designate every member of the Medical Profession; and to be a Member of that Profession, ought to imply a certain social status, no matter what particular branch of the Profession the Doctor may principally practise.

In the meantime, however, there are certain points, respecting which inquiries are already being made. Will the old graduates of Edinburgh be admitted *ex gratia* to the degree of M.C.? Will existing Members of the Colleges of Surgeons have any privileges in this respect? Above all, will the new epoch be solemnly inaugurated by conferring the honorary degree of M.C. on the most distinguished Surgeons of the Empire? What powers the Commissioners or the Senate, or other authorities of the University of Edinburgh, have, we know not, but we trust they are prepared to act liberally and comprehensively in the matter. And we have no fear that the receipt of unholy gains will pollute the occasion, and leave a blot which it will need a generation or two to efface.

THE WEEK.

Sir Benjamin Brodie, as President of the Royal Society, receives the Fellows of the Society and a large number of representatives of the various sections of the educated classes at Burlington-house, this evening. The reception will be peculiarly interesting. Numbers will attend to show their sympathy with the respected President's recent sufferings, and their congratulations at his improvement. His Professional friends, also, are to look upon his career of practice as at an end; for, in correction of an erroneous statement, we have been requested to make known that his house in Savile-row has been taken by Mr. Barnard Holt. Use has been made of this retirement of one who has long been justly regarded as the Head of our Profession to re-open the subject of Medical Peerages. Two years ago an unauthorised and suggestive report that Sir Benjamin Brodie was to be raised to the peerage was copied by the daily press from one of our contemporaries. Our comments on that report, and on others to which it gave rise, may be found in a leading article, entitled, "Life Peerages and Medical Peers," in our number of January 1, 1859. We need not repeat the arguments there adduced in favour of a struggle for the attainment of such a reform in the constitution of the House of Peers. The elevation of men of science to the peerage, and the necessary creation of life peerages, are constitutional changes which must be effected sooner or later; it is only a question of time. Whether Sir Benjamin Brodie may or may not witness the elevation of scientific lords to seats beside the law lords and ecclesiastical lords, no one can question for a moment that if a peerage were offered to him and he accepted

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it, his merits, his character, and his renown would adorn the Senate.

We are informed that the reductions among the Army Assistant-Surgeons, on which we remarked last week, will not take place so quickly as was anticipated. The Secretary for War has reconsidered his decision on the subject, and has arranged with the Director-General of the Medical Department that as vacancies occur among the Second Assistants in regiments they are not to be refilled. All the Second Assistant-Surgeoncies will thus become gradually absorbed, and the future establishment of each regiment at home—and in all the dependencies excepting India—will be one Surgeon and one Assistant-Surgeon, instead of one Surgeon and two Assistants as at present. All vacancies on the staff are to be filled up by taking Assistants from the line regiments, so as to effect the reduction as quickly as possible. We are inclined to believe that this diminution in the Medical element of the army will prove anything but a wise economy. There are many other branches of the military service in which a saving might be effected with certain gain and less risk than in the Medical department. The number of Regimental Assistant-Surgeons provided for in the Army Estimates for 1860-61, was 158; in the Army Estimates for this year, 1861-62, the number estimated for is 93. This refers only to the Assistants of the Infantry of the Line. There is a reduction of one in the Royal Horse Artillery, and two in the Royal Artillery. In the Foot Guards, Household Cavalry, and Cavalry of the Line, the numbers remain the same.

A curious case of alleged poisoning has been investigated at the Lambeth Police-court. Mr. Nott, Surgeon, of Lucas-road, was summoned to a young woman, whom he found on her back on a sofa, perfectly insensible; pulse scarcely discernible, face pale, eyes closed, and pupils dilated; and no smell of spirits. He considered these to be evidences of the administration of a narcotic poison. Emetics and other remedies were useless, and death followed. The father-in-law of the deceased lady, who had last been in her company, and who brought her home to her lodgings in a state of partial insensibility, was accordingly suspected of having administered some poison, and a warrant was issued, under which he was apprehended at his residence in Kent, and brought before Mr. Norton. He then gave what was on the face of it a true and frank statement of the unhappy circumstances of the deceased, who was the deserted wife of his son; he said that they had been out together to recover some pledged property, that she complained of being ill, and that he had administered no poison. He was accordingly liberated on bail, to await further evidence as to the alleged administration of poison. Meanwhile a post-mortem examination, made by Mr. Heath and Mr. Wheeler, set this question at rest. A large clot of blood was found in the right cerebral ventricle, and no sign of poisoning whatever. At the subsequent examination of the prisoner, Mr. Nott was again called, and retracted the opinion he had formerly given. He admitted, further, that when he saw the deceased there was no smell of any narcotic in her breath, nor yet in matters which she had vomited. In cross-examination he further stated that his age was fifty-nine; that he was a Member of the College of Surgeons, but not a Licentiate of the Apothecaries' Hall; that he was registered as a Surgeon on *March* 8, *that is to say, at the very time this inquiry was going on;* he further declared, in reply to a question from counsel, that he had undergone examination at the College. Mr. Humphreys then complained, in indignant terms, of the treatment to which his client had been exposed,—of the unfounded charge of murder, and the revelation to the world of his most secret and painful family affairs. He hoped that Mr. Nott would reflect on the serious injury he had inflicted on a high-minded and honourable gentleman by his hasty and unfounded opinions. In this censure Mr. Norton concurred. In this case it will be observed that the Surgeon had no *Medical* qualification whatever.

Mr. Mitchell, the retired Naval Surgeon of Henley, to whose case we called attention in our Number for January 26, has been acquitted. He was accused of having caused the death of a maid-servant by starvation. There really was not a tittle of evidence in support of the accusation; the only presumption being that a girl who was found in extreme emaciation, without positive disease to account for it, might have been starved. Such a trial and such an acquittal add one more to the proofs of the enormous responsibility which rests on Medical witnesses, of the care they should exercise in collecting their facts, and the rigorous and conscientious scruples with which they should weigh any inference, however plausible, before they allow it to be assumed as actual matter of fact. We have not space this week to discuss the Medical questions raised on the trial; but it is due to Mr. Mitchell to state that all the information we have received leads us to believe that the charge was entirely unfounded. The case is one of peculiar hardship. What satisfaction is an acquittal on a false charge for an honourable and blameless man? The popular ill-feeling, the mental suffering, the loss of money, and the brand of the felon's dock, are not repaid by an acquittal. They who made the false charge should be, and we hope they will be, punished. The real case was that a scrofulous girl with a spinal curvature, and subject to epilepsy, became emaciated by a protracted diarrhœa, and died. We trust that they who invented the fictions about starvation, will be taught by a severe penalty to curb their morbid imaginations for the future.

In the House of Commons on Saturday, Colonel Sykes inquired what security there was that European Medical Officers who might prescribe for native troops in India, should understand their patients' language. Mr. Crawford alluded to the number of Indians now pursuing Medical studies in this country, and inquired whether, like Dr. Thompson, they would be debarred entering the Medical service in India. Sir Charles Wood replied to the first question by saying, that the whole Medical Service in India is under the consideration of the Council, and that every means would be taken to obviate the ill effects of putting in charge of Hospitals Medical men unable to converse with their patients in their own language. He said further, that "natives of India and Africa have no right to enter by competition generally into the Army of the Queen."

The Manchester Medico-Ethical Association has just published its thirteenth annual Report. Regret is expressed at the failure of the Medical Act in protecting the Profession and the public from unqualified Practitioners, and likewise at the injudicious selection of cases for prosecution.

A supplement to the Quarterly Returns of the Births, Deaths, and Marriages in Scotland has just appeared. The death-rate during 1860 was 21·5 per 1000, that of England being 21·1; whereas, during the preceding five years, the Scotch death-rate was 20·2, and that of England 22·1. In the largest towns of Scotland the mortality in 1860 was at the rate of 28·6, in smaller towns at the rate of 22·1, and in the rural districts at the rate of 17 per 1000. In the town

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districts 8·4 per cent., in the country districts 8·9 of the births were illegitimate.

Mr. William Colles, Civil Surgeon, of Pubna, Bengal, has described a new plan for the treatment of aneurism. The artery having been exposed by operation, is to be compressed by a small flat clamp for the space of from six to thirty hours; the clamp producing interruption of the current, and division of the inner and middle tunics. Mr. Colles describes a modification of the plan, which he believes available for aneurism even of the right subclavian; although to apply the instrument, he thinks it may be requisite sometimes to remove an inch of the sternal end of the clavicle.

Sir Charles Young, Garter King of Arms, has presented the Royal College of Surgeons with a collection of Medical portraits formed by his brother, the late Dr. James Forbes Young, of Kennington.

Miss Burdett Coutts has erected a new set of model dwellings for the working classes, in Charles-street, Hackney-road. This is real charity. But we are glad to see that the rents are to be paid in advance, and to be collected weekly, and that no tenant is to be allowed to be in arrears.

Dr. Lankester, in an interesting paper read before the Social Science Meeting at Glasgow, relates a comparison he made between the death-rate of the Burlington-arcade and that of the model lodging-houses called Ingestre-buildings. In the first he found the death-rate 30, in the last, 15 per 1000 per annum. In consequence of this discovery, alterations have been made in the Arcade, which have increased its salubrity.

About a fortnight ago the Attorney-General issued his fiat for the commencement of proceedings in the Court of Chancery on the question between the College of Physicians and the Apothecaries' Company as to the legality of the recent regulation of the College regarding their new order of Licentiates. The case is likely to be argued at an early sitting of the Court.

The Norfolk and Norwich Hospital has published a clear and creditable Report of the officers, management, finances, and statistics of the Institution during the last year. They propose, we are glad to say, to take in a few young women to be trained as pupil nurses. There is also an account of the diseases, and accidents, and operations. When will the London Hospitals issue similar full Reports?

We have received the Papers containing the questions put during the Examination for the Natural Sciences Tripos, held last week at Cambridge. The Examination was held twice daily, for three hours each time, during each of the six days. The Examiners were Dr. Paget, Professors Miller and Henslow, and Mr. Liveing. The Papers contain questions in Inorganic and Organic Chemistry, Crystallography, Mineralogy, Geology, Heat, Electricity, and the Allied Forces, Physical Geography, Botany, and the structure and functions of the various organs of the various members of the whole range of the Animal Kingdom.

We have received several communications condemning Dr. Hassall's present system of lending his name to puffing tradesmen. A little time ago "Blockey's Nourishing Stout" had the benefit of his recommendation; now Messrs. Dakin announce that they have retained his services. When the watch-dog is in the pay of the wolves, it may fare badly with the sheep. Is there any living person so silly as to think that the "retaining of Dr. Hassall" by a tradesman need hinder that tradesman from selling adulterated goods if he choose?

In the House of Commons, on Tuesday, Mr. Slaney moved for a select committee to consider means of improving the dwellings of the working classes in populous towns, and of obtaining for them opportunities of air, exercise, and recreation. He proposed the erection of new dwellings by capital raised on the limited liability principle. The motion was withdrawn, on the ground that ample facilities exist already for raising and applying capital for the purpose. Mr. Slaney's speech and Sir G. Lewis's reply are almost an echo of our article last week. The evil is admitted; the remedy lies in the benevolence and enterprise of private individuals.

JUNIOR MEDICAL SOCIETY.

At a General Meeting of the Members of the several Hospital Medical Societies in union, held in the Great Hall of King's College, Strand, on the 12th of March, 1861,

Dr. Conway Evans, of King's College Hospital, in the Chair; the Chairman made a few remarks upon the advantages to be derived from the foundation of a Students' Society, and gave a synopsis of the proceedings that had already been taken for the foundation of the Society, referring particularly to the exertions of Mr. Ernest Hart and Mr. Alexander Squire, of University College, on its behalf, with whom the idea originated. The Hon. Sec., Mr. Henry Wood, of St. George's Hospital, was then called upon by the Chairman to read the resolutions drawn up by the Provisional Council, for the consideration of the Members of the Society at the General Meeting.

The resolutions having been read, were then severally put from the chair.

1. "That this Society be called the 'Junior Medical Society of London.'"—Carried unanimously.

2. "That the objects of the Society be:—(*a*) To obtain Papers from its Members explaining the opinions and practices in vogue at the various Hospitals; and treating of all other subjects in the domains of Medicine, Surgery, and the allied sciences. (*b*) To examine and discuss Pathological specimens exhibited by its Members. (*c*) By affording facilities for the professional association of students from the various Schools, to increase their mutual acquaintance, and to encourage a feeling of sympathy and union in their general body."—Carried unanimously.

3. "That the Society shall consist of Ordinary and Honorary Members; that the Ordinary Members shall be such of existing Hospital Medical Societies in Union as are not actually in practice. That the Honorary Members shall be such Members of existing Hospital Medical Societies in union as are actually in practice; and that those gentlemen who are on the Staff of a Hospital or Medical College be ex-officio Honorary Members."

Mr. Belinfante, of University College Hospital, said, that he did not think there was sufficient liberality shown in this resolution, and that all Student's of Hospital Schools should be admitted to the Society without restriction; he therefore proposed as an amendment, "That the Society shall consist of Ordinary and Honorary Members, Ordinary Members shall be Students of any recognised Medical School of this metropolis."

Mr. Brett, of Westminster Hospital, in seconding this amendment, said that the only way to found the Junior Medical Society on a firm basis was by throwing open the portals to all students of Hospital Schools.

Several gentlemen having spoken in favour of, and against this amendment, it was put to the vote, when it was lost by an overwhelming majority.

The resolution was then put from the chair, and carried unanimously.

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4. "That only Ordinary Members be allowed to read papers or exhibit specimens, but that Honorary Members have the privilege of taking part in the discussions."

Mr. Belinfante moved as an amendment, "That this resolution be omitted;" thinking that all Members, without restriction, should be allowed to read papers.

Mr. Brett, of Westminster Hospital, seconded this amendment, believing that it would be difficult to obtain papers from Students in the strict acceptation of the term, and that it would be more profitable to the Society if the Demonstrators and others immediately concerned in the instruction of Students, were allowed to read papers.

Dr. Sanson, of King's College Hospital, supported the resolution, giving it as his opinion, that the Society should be essentially a Students' Society; and that if senior men were allowed to contribute papers, it would deter many students from doing so.

Mr. King, of the London Hospital, thought that House-Surgeons should be considered as students, and allowed to read papers.

Mr. Canton, of Charing-cross Hospital, said that in his own Medical Society the senior members were at first allowed to read papers, but that afterwards they were restricted to the students, and that the Society had been in a much more flourishing state since that period.

Mr. Ansty, of St. George's Hospital, Mr. Wood, of the London Hospital, and others, also took part in the discussion. —The amendment was then put from the Chair, when it was lost by a great majority. The resolution was then put to the vote, and carried unanimously.

5. "That students of Hospitals where there is no Medical Society be admitted to the Society by ballot, having been proposed and seconded by two Ordinary Members of the Society at the previous meeting, on payment of an entrance fee of ——."

Mr. Belinfante proposed, as an amendment, that all students of Hospitals should be admitted by ballot, saying that he believed there were many gentlemen who, though they did not belong to their own Hospital Medical Society, would yet be willing to join the Junior Medical Society of London.

The Chairman declared this amendment to be inadmissible from Rule 3, already passed. The resolution was carried unanimously.

6. "That, as far as possible, the papers be read by Members of the several Hospital Medical Societies in union by rotation."—Carried unanimously.

7. "That the Council shall consist of two delegates chosen by each Hospital Medical Society in union, such delegates being Ordinary Members of the Society."—Carried unanimously.

8. "That the Council of the Junior Medical Society do manage the business of the Society, and be empowered to make such Bye-laws as may be thought necessary, subject to the approval of the Members of the Society at the next General Meeting."—Carried unanimously.

9. "That the officers of the Society shall consist of a President, Vice-President, a Treasurer, two Honorary Secretaries, and Council."—Carried unanimously.

10. "That the President be elected annually by the delegates from among their own number, and act as Chairman of Council, and preside at the General Meeting of the Society."

Mr. Ansty, of St. George's Hospital, proposed the following amendment, seconded by Mr. Brett, of Westminster Hospital,—"That the President be elected not especially from among the delegates, but that each Ordinary Member be qualified to be a candidate for the Chair."—This amendment was lost.

Mr. Bastan, seconded by Mr. Belinfante, proposed, as an amendment, "That the President be chosen from the Delegates by vote at a General Meeting of all the Ordinary Members of the Society."

Mr. Baker Brown spoke in favour of the resolution, believing that it would be better for the Delegates to elect the President from among their own number, as, in the event of the President being elected by the Members from their body, the Hospital which could muster the greatest number of students would be enabled to return the President, which would be unfair towards other Hospitals.

Mr. Murray, of St. George's Hospital, spoke in favour of the resolution.

Mr. Squire explained that this resolution had been passed by the Provisional Council under the belief that it would be impossible for the Members at large to know whether any Member proposed as a candidate would be suitable for that office, and that, as the Delegates were picked men from the several Hospitals, and had frequent opportunities of meeting one another, they would be enabled to judge which was most fitted for the Presidential Chair.

The amendment having been rejected, the resolution was put to the vote, and carried.

11. "That the Vice-President shall consist of one Member chosen annually by each Hospital Medical Society in union."—Carried unanimously.

12. "That the Chair be taken, at Ordinary Meetings, by the Vice-President, chosen by the Hospital Medical Society which supplies the paper, or, in his absence, by the President of the Junior Medical Society of London."—Carried.

13. "That the Treasurer be elected annually by the Delegates from among their own number."—Carried.

14. "That the Secretaries be elected annually by the Delegates from among their own number."—Carried.

15. "That the Ordinary Meetings of the Society be held not oftener than once a month."

Mr. Belinfante proposed, as an amendment, that the words "not oftener" be omitted.

This amendment not being seconded, the resolution was put from the chair and carried unanimously.

16. "That the meetings of the Society be held at some central place if possible."—Carried.

17. "That only Members of this Society be present at the General Meetings of the Society, and that they be admitted by printed tickets, to be issued by the Secretaries of the several Medical Societies in union."

Mr. Mason, of Middlesex Hospital, proposed as an amendment, seconded by Mr. Lamb, of Guy's Hospital, that, after the words "Medical Societies in union," there be added, "that the Honorary Members shall not be allowed to vote on questions affecting the general working of the Society."

This amendment was unanimously carried.

The amendment was then put as a substantive resolution from the chair, and unanimously carried.

18. "That each Member be allowed the privilege of introducing a visitor to the Ordinary Meetings of the Society; but, that the same visitor be not allowed to attend more than two meetings of the Society in the same Session."—Carried.

19. "That the expenses of the Society be defrayed by a contingent, furnished by the several Medical Societies in union, *pro ratâ*; and that the rate be levied according to the number of new Members admitted during the preceding year."—Carried.

20. Resolution, proposed by Mr. Mason, seconded by Mr. Skey, of Charing-cross Hospital:—"That no alterations in the Rules of the Society shall be made without notice of such alteration having been given a month previously at a meeting of the Society, and the votes of two-thirds of the Ordinary Members present at a General Meeting, called by the Council for that purpose, being recorded in favour of the alteration."

This resolution was put to the vote and carried unanimously.

Mr. Winterbottom, seconded by Mr. Hickman, proposed as an amendment, that any suggestion now made for any additional regulation shall be referred to the Council for consideration, and by them presented at a General Meeting of Members for confirmation.—This amendment was rejected.

The resolution was then put to the vote and carried.

Mr. Churchill, of Guy's Hospital, Honorary Treasurer *pro tem.*, then presented a statement of accounts, showing that £3 12s. 6d. had been subscribed by the Preliminary Meeting, and that £4 10s. had been expended, leaving a deficit of 17s. 6d.

Mr. Madden, of King's College Hospital, seconded by Mr. Bastin, of Charing-cross Hospital, proposed, "That the thanks of the meeting to the Provisional Council, for the care and trouble with which they have drawn up the resolutions and transacted the necessary preliminary business of the Society, be recorded in the Minutes."—Carried unanimously.

Dr. Conway Evans having vacated the chair, a vote of thanks to the Chairman, for his kindness in presiding, was carried by acclamation.

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REVIEWS.

Adulterations Detected; or, Plain Instructions for the Discovery of Frauds in Food and Medicine. By ARTHUR HILL HASSALL, M.D. Lond. Second Edition. Pp. 712. London: 1861.

THIS work appears to be an abridgement of the reports of the famous investigations which Dr. Hassall made as an Analytical Commissioner some years ago. Of the boldness of that publication there can be no doubt; nor yet of the risks which the analyst and the publisher incurred; but it appears to us that the matter for which the greatest credit is due to Dr. Hassall is his demonstration of the value of the microscope in detecting adulteration by means of physical structure in cases in which chemical tests fail. He discomfited the Chancellor of the Exchequer and his advisers who asserted that there was no method by which the adulteration of coffee with chicory could be detected, and he showed that such a method did exist, and that a great amount of hitherto undetected fraud, which injured alike the revenue and the consumer, might be brought to light and punished. He exposed the fallacy (which we regret to say is still accepted as truth by many persons) that adulteration of coffee is beneficial to the poor man, inasmuch as it enables him to get the article at a lower price. He has the credit, further, of having galvanised the chemical staff of the Commissioners of Inland Revenue, for we learn from the last Report of the Commissioners that about sixty Supervisors of Excise have furnished themselves with expensive microscopes, and that by this means extensive frauds upon the revenue have been found out and punished; and—that the practice of adulteration is on the increase notwithstanding.

The work before us professes to give, "First, a description of the various adulterations to which each article of consumption, and many medicines, have, up to this date, been subjected; and, secondly, the details of the various methods by which these sophistications may be discovered."

Suppose we turn at random to the volume, and take the article on bread as a sample of the whole. We first meet with a sketch of the various cereal flours; and first of the wheat flour. Dr. Hassall gives us the varieties of wheat flour and the respective quantities of each variety to be obtained from a quarter of wheat; then the composition of wheat flour and a short history of the vegetable gluten, fibrine, starch, etc., which are found in it. Next the structure of the grain of wheat, with well executed engravings of sections of it, and of the appearance of wheat flour. Similar details follow respecting barley, rye, oats, Indian corn, and rice, and after this the appearances presented by wheat starch which has been subjected to moist and dry heat. Next we find a long account of various fungi which infest grain, and of *vibriones*, *acari*, and other parasitic animals which prey on it, followed by a description of yeast, and of the various modes of making unfermented bread. After this a general account of the substances used to adulterate flour; which are the flour of other seeds, besides alum, and sulphate of lime; then a history of "cones flour" employed by bakers to dust their boards with. After this an argumentative account of the adulterations of bread, and especially with alum, for the alleged adulteration with bone dust and ashes are quickly dismissed. In the section "*On the Detection of the Adulterations of Flour and Bread*," we have more microscopic views of the various flours and organic substances used for adulteration, and some remarkably meagre directions for the chemical examination, winding up with a table of the quantity of grain imported in 1854 and 1855, and nine months of 1856, the relation of which to the main purpose of the work is not very apparent.

In speaking of the detection of alum, he says:—

"Some chemists have described the following method for the detection of alum:

"Soak the flour or bread in water, filter the solution, and treat with ammonia. The precipitate which ensues is described as alumina. This process is utterly fallacious, as a precipitate always occurs under such circumstances, even in the absence of alum, the precipitate in general consisting of nitrogenous matter, and earthy phosphates. We refer to this process in order that it may be avoided."

He does not tell us, however, that this process, which has been known to be fallacious for a generation, was the process employed by the "Sanitary Commission," and published by Dr. Hassall himself! Verily, if the bakers at that date had had better consciences, or more courage, the publication of their names and the allegations of fraud practised by them might not have been altogether satisfactory to the Publisher or his Analyst.

The microscopic drawings throughout the work are excellent and abundant, and the microscopic is the strong part of the book. There is a very large amount of information contained in it, not only on the specific subject of adulteration, but on collateral questions concerning the articles described. The chemical department is brief and vague; it is deficient in details, and of little use to anyone who has ever worked in a laboratory. There is, in the case of bread, no description of the physical characters of good bread; of characters which make adulteration probable; and of the mechanism of setting to work to examine a loaf. The detection of rice, barley, and other foreign farinæ, in *bread* is admitted to be difficult, and is slurred over. We believe that, in a subsequent edition, Dr. Hassall would do service by condensing the general information, and giving fuller and more precise directions and examples in detail.

A Medical Handbook, Comprehending such Information on Medical and Sanitary Subjects as is desirable in Educated Persons: with Hints to Clergymen and Visitors of the Poor. By FREDERICK WILLIAM HEADLAND, M.D., B.A., F.L.S., Fellow of the Royal College of Physicians, etc. Pp. 348. London: 1861.

A CANNY Scottish beggar asking for relief at a country house was told that there were no broken victuals for him; "Ye may een gie it me whole," he replied. Now, books such as that before us, always remind us of broken victuals, or of that dish called a Harlequin, so celebrated in the "*Mystères de Paris*," in which the tails of fish, the wings of pigeons, and the rind of cheese, were commingled with scraps of sweets and pastry. Here we have an epitome of hygiene and animal chemistry, fragments of Practice of Physic and Materia Medica, and the treatment of accidents and emergencies. We think that, if any clergyman or district visitor be competent to meddle with colchicum and croton-oil, or desire information on Bright's disease or phthisis, he had better read a Medical book. Watson is not unintelligible to any educated person, nor are Dr. Guy's or Druitt's various Handbooks.

As for the Materia Medica and prescriptions, we fear that they are superfluous in skilled hands, and dangerous in unskilled. The "Practice of Physic" is fragmentary; the Treatment of Accidents and Emergencies has been given over and over again, in a popular form, *ad nauseum*; but the introductory chapters on Hygiene have the stamp of great good sense, and we hope will be carefully studied. The author's opinions on clothing are sensible; and in some respects would please Mr. Urquhart (if such an expression be admissible). "Man is the only animal that voluntarily wears clothing; but the habit of covering almost the whole body has no necessary connexion with refinement, nor even with the feeling called modesty, which is itself, to some extent, an artificial thing, and the result of association and use." We commend this passage to clergymen of the fig-leaf school, and the following to those who send out missionaries without an adequate sense of the entire responsibility they incur:—

"One reason why the European finds it difficult or impossible to live in a tropical clime is, that he can seldom divest himself of his prejudice in favour of thick and tight-fitting garments." "It is a curious and instructive fact that the mortality among the races of the South Sea has been immensely increased since their conversion to Christianity. The same is the case with the converted and civilised negroes of the West Coast of Africa." This cannot be ascribed to change of faith. "But I do partly ascribe it to the fact that some of the missionaries, with more zeal than knowledge, have, in times past, induced their disciples to adopt the costume as well as the faith of the European. It is well that in the present day a better system prevails, but there is, I fear, still room for improvement. I should say that there can be no more melancholy spectacle than that of a sweltering assembly of black men, arrayed in cloth coats and trousers, and of black women in stays and crinoline."

District-visitors may learn that clothing is a far more economical gift to the poor than fuel.

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We suppose there is some reason in the nature of things why writers of this class of books praise brown bread and decry pie-crust. Dr. Headland is no exception. He has one or two little crotchets besides. In a passage marvellous for its logic, he asserts the innocuity of the soot which contaminates the air of towns. Sooty air is not unwholesome, because "the smoky atmosphere of the city is beneficial in some asthmatic cases. And in many continental towns, where scarcely any coal is burned, the mortality is far higher than in London." If this astounding morsel of argumentation had been written by a woman, it would have been received with just commiseration. Dr. Headland, when he says "coal-fires contaminate the air no more than other kinds of fuel, *i. e.*, by producing carbonic acid and using up oxygen," forgets the abundant sulphur in coal. He should read Angus Smith, on "The Air of Towns," before he prepares a second edition.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

ON THE LENGTH AND WEIGHT OF NEW-BORN INFANTS.

By E. VON SIEBOLD.

Dr. E. von Siebold, of Göttingen, has been accustomed to carefully weigh and measure all the new-born infants at the Midwifery Institutions with which he has been connected from the beginning of 1852, his chief object being to ascertain whether the statement is correct that new-born infants lose weight during the first days after birth, afterwards regaining and augmenting it. Not only may such investigations prove of importance in this obstetrical relation, but also as regards physiology and juridical medicine. Weighing children has been employed in these Midwifery Institutions to determine how far artificial feeding would be tolerated, whether an illness of the mother is acting injuriously on her child, and as one element in the choice of wet-nurses. Dr. E. von Siebold first presents a table of the weights of 3000 infants (1586 male and 1414 female), weighed immediately after birth. From this table (for which we have not space) it results that by far the greater number of the children (2215) weighed between 6 and 8 pounds(a). From 5¾ to 6 lbs. the numbers rose from 99 to 268; and from 8 to 8¼ lbs. they fell from 226 to 67, and never rose again at any weight to 100. From 8¾ to 9¼ lbs. they sank from 61 to 8, rising, however, at 9½ lbs. to 21. Only 6 weighed 10 lbs., one 10¾ lbs., and two 11 lbs. The author has never but once met with a child weighing 11¾ lbs. The most frequent weight in the 3000 was 7 lbs., numbering 426. It is a remarkable fact, that until the weight of 7 lbs. the female infants exceeded the males in number, the latter thenceforward predominating. This agrees with Scanzoni's figures, who found that the weight of the male infants in 9000 births averaged 7 lbs. ʒij, or ʒiij.; and of female infants, 6 lbs. ʒxxviij., the female infants weighing less than 7 lbs. more frequently than the males. From these statements and those of various other writers here quoted, the conclusion may be drawn that the normal weight of a mature new-born infant is not less than 6 nor more than 8 lbs, the average weight being 6½ or 7 lbs., the smaller number referring to female, the higher to male infants.

Chaussier and Quetelet have already shown that for the first few days after birth a diminution in the weight of the infant takes place, and since the beginning of 1859 the author has paid much attention to this subject, having carefully examined the weights of 49 children. In 35 of these diminution did take place, 16 of the number losing ½lb., 14 ¼lb., and 5 1lb. In these last instances, however, the nutritive process was manifestly defective, and the children did not rally again, so that they cannot be included in the statement. The normal diminution of weight was observable in the 30 children from the second to the third day after birth, the weight remaining then the same to the fourth, or even the sixth day. From the fifth to the seventh day, mother and child being well, the weight which existed at birth was again attained, and then increased. In 14 of the children examined neither decrease or increase of weight was observed until from the sixth to the eighth day, when increase commenced. The mean of Quetelet's observations is thus stated. The child weighed at birth 3126 kilogrammes; on the second day, 3057; on the third, 3017; on the fourth, 3035; on the fifth, 3039; on the sixth, 3035; and on the seventh day, 3060 kilogrammes. This diminution in weight in most of the children, and the arrest of its increase in others is evidently dependent upon the change in its mode of nutrition on arriving in the world. The character of the early milk is very different to that which it afterwards assumes, containing more colostrum corpuscles than milk globules, and possessing rather a purgative than a nutritive action. Not only is the child's weight found to diminish, but its entire body gives signs of the defective nutrition, the redness of its surface being exchanged for one of a yellow, or at least a white colour, while there is also observable a certain relaxation of its limbs, signs which all disappear again in a few days. The author is sensible that his numbers are too small to enable him to arrive at any decisive conclusions, and he appeals to other obstetricians for their co-operation in the investigation.

A large proportion of the children were weighed daily after the eight days above alluded to, in order to ascertain their rate of increase. The statement of their increasing stationary or decreasing weight is given in detail from day to day, but for this we have not space. Suffice it to say, from a comparison of the whole, it results that the average normal increase within the first nine days may be set down at ½lb., and that within the first fourteen days at ½lb. Beyond this age the number of children examined was not sufficient to justify any exact conclusions, although it seems most probable that the increase of 1lb. weight is not attained, as a general rule, until the twenty-eighth day.

The length of new-born infants exhibits much less difference than does their weight. Of the 3000 children measured, the length varied from 15 to 21 inches; but out of the number no less than 1674 measured 18 inches and 695, 17 inches, so that the mean length was between 17 and 18 inches. As in the case of the weights, so in the lengths, the females exhibited the lesser numbers. Thus, of 695 children which measured 17 inches 380 were females and 315 males, while of the 1674 which measured 18 inches 867 were males and 807 females. Of 305 children 19 inches long, 198 were males and 107 females; and of the 49 which measured 20 inches, there were 37 males and only 12 females. Elsässer and Quetelet observed similar results.—*Monatsschrift für Geburtskunde*, Vol. xv., pp. 337—353.

(a) The author does not specify it, but we believe he means the pound Troy.

EXCERPTA MINORA.

Bromide of Iodine as an Application in Diphtheria.—Dr. Metcalfe observes that he has found great benefit from the thorough application of this substance (five drops to an ounce of mucilage) to the diphtherial patches every two hours. The antiseptic power of the bromide at once checks the fetor of the breath, and soon afterwards the false membranes begin to disappear. As an internal remedy, he relies mainly on the sesquichloride of iron.—*American Medical Times*, No. 5.

Quinine and Ferrocyanuret of Iron in Rheumatic Dysmenorrhœa.—Dr. Snelson states that he has pursued this treatment for several years with satisfactory results. He first empties the intestinal canal by purgatives: and, during the menstrual period, he employs the warm bath and gives opium combined with camphor and ipecacuanha to relieve the pain. After the period has passed, he commences with a pill composed of two grains of sulph. quin. and an equal portion of the ferrocyan. ferri, to be taken morning, noon, and night,—continuing them during the intra-menstrual period.—*American Journal of Medical Science*, January, p. 296.

A New Suture Needle has been invented by Professor Eve to carry wire or silk, principally the former. It is a hollow needle, with an aperture just before its point upon the inner curved surface for the egress of the wire after the edges of the wound have been punctured by the needle. It is mounted upon a handle. The lower end, or eye, has the opening for the wire upon its under surface, so that the needle is thrust through the parts. The wire being straight, with its point within the needle, is now pushed a short distance through, and the needle is withdrawn, leaving the wire in its place. It is now cut off, so as to leave an end protruding from either edge, and twisted or bent, as the case may require, care being

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taken to prevent the sharp ends from wounding the surrounding parts. Platinum wire would prove better than silver, which is commonly used, from its being softer and less resisting. It is a simple and ingenious improvement on the ordinary needle, very useful in staphyloraphy, and the operations of the Dentist.—*American Journal of Dental Science*, October, p. 594.

Accidents and Irregularities during First Labours.—Dr. M'Sherry observes that on looking over his notes he has been struck with the great extent to which primiparæ are more liable to accidents than multiparæ. In his own practice he has had notable irregularities or disturbances to contend with in more than 33 per cent. of his primiparæ, while in multiparæ this has happened only in 10 per cent.—*American Journal of Medical Science*, January, p. 390.

Chloroform Liniment in Toothache.—Take the white of an egg, and add an equal bulk of chloroform, and digest four hours at an ordinary temperature. Apply this to the gum, immediately above the aching tooth by saturating a piece of lint, over which is to be placed a second piece of dry lint, larger than the first, in order to protect the lips which are to be allowed carefully to fall on the two in order to retain them in their places. We have found this invaluable in the relief of such disturbances as are not dependent on fully developed inflammation, such as neuralgic disturbances, and the first stages of periostitis. A more powerful liniment can be made by taking one part of white of an egg and four of chloroform, placing them in a bottle, which is to be completely plunged into a water-bath at from 120° to 140°. Gelatinisation takes place in four minutes. This is to be rubbed on any painful part, and great relief is produced. The slow cauterisation it gives rise to, and the protection of the part from the atmosphere, render it a very powerful counter-irritant. The cold preparation is, perhaps, the best and easiest mode, and when a decided effect is required, it should be repeatedly used.—*American Journal of Dental Science*, October, p. 595.

FOREIGN CORRESPONDENCE.

GERMANY.

BERLIN, March 6.

PROFESSORS VIRCHOW AND VON BAERENSPRUNG ON SYPHILIS.

AN animated discussion has lately taken place in the meetings of the Medical Society of Berlin, and in the periodicals which are published here, between two of our leading men, Professors Virchow and Von Baerensprung, on the nature and treatment of secondary and tertiary syphilis. Both these gentlemen are Physicians to the Charité Hospital, and Von Baerensprung has the syphilitic patients under his immediate care, while Virchow is, as you are no doubt aware, Director of the Institute for Pathological Anatomy connected with that Hospital. Some time ago the former, who has always been a staunch adherent of the mercurial treatment of syphilis, startled the Profession by stating that he had entirely ceased giving mercury, and that there was neither a specific method nor a specific remedy, which was at all certain to cure the disease. He then gave it as his opinion, that amongst the numerous methods of administering mercury, the inunction cure was the most efficacious, but that even after this relapses were frequent, and that they sometimes took a very severe and destructive form. He acknowledged that mercury generally caused the symptoms to disappear rapidly, but maintained that the distemper was not eradicated from the system by this treatment, but only became latent. The same was his opinion with regard to iodine and Zittmann's decoction, which he considered were capital auxiliary means in the treatment of syphilis, but were also not certain in their effects. The water-cure, which had been much tried of late, was no remedy for syphilis; and he had lately had under his care a patient who had been at different hydropathic establishments for eight years consecutively, and nevertheless after that time a perforating ulcer in the palate broke out; but although the water-cure had no influence upon the disease itself, it was to be recommended in cases where syphilitic patients had been very much weakened by the disorder and its treatment. As soon as syphilis had taken root in the constitution, there was no longer a specific virus in it, which it was possible to quench or to neutralise; but that, like scrophulosis, it was a dyscratic disorder which infected the whole organism. Just as no Medical man was able to warrant the radical cure, within a given time, of a scrofulous child by means of iodine, cod-liver-oil, or nut-leaves; but as by the use of these remedies, and by prescribing a proper diet, the health was improved, the morbid disposition diminished, and in time annihilated,—so it was with syphilis, the symptoms of which were sometimes made to disappear within a few weeks by a judicious combination of laxative, diuretic, and diaphoretic remedies, by which the general metamorphosis of matter was increased. Such, however, were exceptional cases; the rule was that the disease would soon appear again, although perhaps in a milder form, until by repeated courses of treatment, it might at last be destroyed. Many patients treated by mercury had been cured, but not by that remedy; on the contrary, it rather retarded than accelerated the cure. Mercury caused the symptoms to become latent; and the period of latency was longer or shorter according to the quantity of mercury which had been given; it therefore prolonged the disease, and the relapses which followed were generally of an unfavourable and very destructive character. If syphilis was treated without mercury, there was scarcely ever a period of latency; but the symptoms continued without interruption until a complete cure was effected. He had seen many cases in which this complaint had been neglected, and had been left for a long time without any treatment whatever; and he had not seen any destructive local forms in these, while all cases of perforating ulcers, caries, and necrosis, were such as had been treated before by a large amount of mercury.

In the discussion which followed the reading of this paper, Professor Virchow said that he could not agree with Von Baerensprung as to there not being a remedy for syphilis. The only difficulty was, that we had no criterion whether, in a given case, a cure had been effected or not. As we cannot judge of the condition of the internal organs, we can only form an opinion from the external symptoms. He did not believe in latent syphilis, but thought that in cases where such had been assumed nuclei of the disease had remained in one or more organs, and that from these the blood or other parts had been again infected. No fact was known which proved that a permanent dyscratic disorder of the blood was invariably connected with constitutional syphilis. The distemper was an intermittent one, which broke out at intervals, and proceeded from certain nuclei left in internal or external organs; and the duration of the disease was synchronic with the existence of such nuclei, as it ceased when these disappeared. When the nuclei ceased to produce infectious matter or the absorption of such matter into the blood was interrupted, there seemed to be a period of latency, which was more especially the case if the nuclei were seated in an internal organ inaccessible to direct organisation. He therefore considered it most urgent that attention should be paid to the local morbid phenomena, and that the seat of the disease should not be sought for in any alteration of the blood. He believed that mercury cured the external, and most probably also the internal affections; but that only when we knew more of the conditions of these latter than we do at present should we be able to say when a sufficient quantity of mercury had been administered. To this Von Baerensprung replied that the views of Virchow were too anatomical, and were contradicted by certain facts connected with hereditary syphilis, as children often inherited the disease from the father, the mother being healthy. It was preposterous to assume that in such cases the spermatozoa carried little gummatous tumours, from which the disease developed itself in the foetus. It was the potentia of the sperma which contained the disease. Thereupon Virchow declared that Von Baerensprung, in speaking of a potentia seminis, had ventured upon transcendental ground, where he was unable to follow him.

Some time after this discussion had taken place, the same subject was again brought before the Society by Dr. Siegmund. He said he had just returned from a journey, during which he had carefully examined the syphilitic wards in a large number of Hospitals; and that he had become convinced that in no one of them were the general arrangements better, and the cases more carefully taken down, than in the Clinic of Professor Sigmund, in the General Hospital at

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Vienna. This Physician had almost always recourse to mercurial treatment, and more especially to inunction. In the General Hospital of that city all cases of syphilis were taken in indiscriminately, without any letters of recommendation, and gratis, and the Physician was allowed to keep his patients in the wards for any length of time he might think proper, either in order to improve the general health before a specific treatment was commenced, or after the cure seemed to be accomplished, for the purpose of observing whether a relapse would take place. In the Charité, on the contrary, the conditions were illiberal; the comforts of the patients were not attended to, and those who had once been treated there and dismissed were unwilling to return if again affected with syphilis. It was therefore impossible to form a correct opinion of the number and nature of relapsed in-patients who had been in that Hospital; while the Clinic at Vienna was so easily accessible and so agreeable to patients, that they most willingly returned when again attacked. It was well known that the syphilitic symptoms would often disappear if diaphoretic and laxative remedies were used alone or together with iodide of potassium; and if the symptoms decreased, and no fresh ones appeared, the authorities at the Charité considered this to be a cure. He had himself seen persons who had been dismissed as cured from that Hospital and who had symptoms of secondary syphilis at a time when these could not have been produced by a new infection.

This discussion passed from the Medical Society of Berlin to the periodicals; and there has been a regular warfare between Virchow and Von Baerensprung carried on in the late numbers of the official journal of the Charité, of Virchow's *Archiv für Pathologische Anatomie* and the Deutsche Klinik. In this battle each of the combatants considered himself the victor; but public opinion is altogether on the side of Professor Virchow. He has refuted the objection raised by Von Baerensprung regarding hereditary syphilis by pointing to the fact that syphilitic fathers, even such as suffer from gummatous tumours of the testicles, have had healthy children; from which it appears that the sperma is only at times, but not always infectious, the disorder being intermittent, and infectious matter being now and then absorbed from certain nuclei into the blood, and thence passing into the sperma. Von Baerensprung's microscopical observations on the difference of secondary and tertiary productions of syphilis led him to assume that the former were generally amyloid, and the latter tubercular; Virchow, however, afterwards proved that the amyloid degenerations are no direct productions of syphilis, but only one link of a chain of various passive disturbances which are observed in consequence of cachexia and marasmus; that Von Baerensprung had a very incorrect view of the nature of tubercle, and that in specie the syphilitic tubercle was nothing more than a gummatous tumour, similar to indurated chancre, indolent bubos, and other productions of the so-called secondary period. Von Baerensprung's assertion that the granular and amorphous matter at the bottom of an indurated chancre was amyloid, and became red if iodine was added to it, has also been refuted by Virchow, who showed that the matter referred to is neither amorphous, nor does it become red if iodine be added to it; but that there is at the bottom of the indurated chancre an excessive formation of connective tissue and a fatty detritus of elements, the same as is the case in gummatous tumours of internal organs.

One of the most extraordinary assertions of Von Baerensprung in this discussion was, that mercury is a remedy which paralyses the general metamorphosis of matter; while he at the same time acknowledged the rapid curative effect it exercised in almost all syphilitic affections! Virchow, thereupon, asked, how a rapid cure of syphilitic affections is possible without increased metamorphosis of matter? Everyone knows that if mercury is given gummatous tumours are absorbed, salivation is induced, and, if the remedy is incautiously administered, colliquative diarrhœa and catarrh takes place. These are surely no signs of a diminished metamorphosis of matter. Von Baerensprung adduced as a proof of his theory that the quantity of urea excreted was diminished when mercury was taken; but if this metal really paralysed the metamorphosis of matter, the quantity of urea and other excretions would of course be increased. If it is, therefore, a fact that urea is diminished under the administration of mercury, the same speaks just against Von Baerensprung's theory.

DR. LEUBUSCHER ON NERVOUS DISEASES CAUSED BY SYPHILIS.

Dr. Leubuscher, who has made a special study of the diseases of the nervous system, and who has been Professor of Clinical Medicine at the University of Jena, but resigned some years ago and returned to Berlin, has just brought before the same Society his observations on those nervous disorders which are consequent upon syphilis. According to him there are three classes of cases of this kind,—viz., such in which the nervous affections are caused by a morbid process spreading to the nervous matter from the parts surrounding it, such as meningitis dependent upon syphilitic caries of the skull, or neuralgia and paralysis caused by exostoses pressing upon one or several nerves; secondly, cases in which the syphilitic cachexia produces a disposition to diseases of the nervous system, which however only take place if other causes supervene; thirdly, cases of syphilitic exudations which occur into the nervous tissue just as into other organs (skin, testicle, etc.). He affirms that in all these cases no pathognomonic symptoms are to be observed, but that the diagnosis, whether the case is one of syphilitic origin or not, must be deduced from the history of each case individually. They are always observed at a later period of the disease, and belong to the so-called tertiary symptoms; they may take every form of nervous disorder that exists. Thus he has seen cases of sciatica, brachial neuralgia, tic douloureux, epilepsy, impotence, and paralysis due to venereal disease. Diseases of the mind are also produced by syphilis: these are generally cases of syphilitic hypochondriasis, which is either due to anxiety and distress felt about relapses by which the patient believes himself to be threatened, or by shame, or by disturbances of nutrition in the brain. In this case only circumscribed parts of the encephalon are affected, but there is no progressive morbid change of the cortical substance. Dr. Leubuscher has also observed cases of mania and delirium, but denies the correctness of Jacoby's theory that syphilis and gonorrhœa are the most frequent cause of insanity. He thinks that, generally speaking, syphilis is too frequently looked upon as the cause of diseases of the nervous system; and regrets that, in pursuance of this view, patients are sometimes treated with mercury when this is especially injurious, as in atrophy of the spinal cord. After this paper had been read, Professor A. Von Graefe remarked that more than one-half of a very large number of cases of paralysis of the third pair, which he has seen, were consequent upon syphilis. Amaurosis syphilitica is generally dependent upon choroiditis or retinitis, and the ophthalmoscope has always shown specific pathological changes in such affections.

ELECTION OF M. CLAUDE BERNARD INTO THE ACADÉMIE DE MÉDECINE.—Most persons would have thought that M. Claude Bernard would have long since been a member of this learned body; but his natural entrance is by the Section of Physiology in which no vacancy has presented itself since 1847 until that occasioned by the recent death of M. Duméril. The Academy at once elected M. Bernard by 72 out of 79 votes,—the other candidates being MM. Sappey, Béclard Verneuil, and Béraud.

WATER-GAS.—In the *Journal für Gasbeleuchtung*, there is a notice of Gillard's water-gas at Narbonne, the component parts of which are stated to be, 950 feet of hydrogen, weighing 4·75 lbs.; 50 feet of carbonic oxide, weighing 3·54 lbs.; 454 feet of carbonic acid, weighing 50·55 lbs. Water-gas is prepared by three different processes. By Mr. White's process, water was admitted in drops into a diaphragm-retort, and the steam being decomposed by contact with glowing charcoal, the gases thus generated were passed over Boghead cannel during its distillation in the retort. Two Frenchmen, M. Gillard and M. Isard, have since applied water-gas to illumination, but in different ways. M. Gillard commences by super-heating the steam, and passes it in that state over glowing charcoal, thereby decomposing the largest possible portion of the water employed. The gas, after the removal of carbonic acid by lime, is applied in that state to heat, during its combustion, a net of platinum wire, the incandescence of which produces light. M. Isard also superheats the steam before its decompoaition, and then brings it into contact with the vapour of coal-tar, and thus produces an illuminating gas which may be burned in the usual manner.

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GENERAL CORRESPONDENCE.

THE "LONDON MEDICAL REVIEW."

Letter from Dr. Wilks.

[To the Editor of the Medical Times and Gazette.]

Sir,—I am not anxious to intrude my private concerns on your readers, but the public journals afford the only method by which I can make known my grievance. It is this: that I am supposed to be connected with a publication styled the *London Medical Review*, and, in consequence, have letters directed to me from England, Scotland, and Ireland, asking me in what manner I am associated with it.

Will you allow me to inform your readers that I have no connexion whatever with that publication and never had any. I certainly wrote a paper after a great deal of pressure, and for which I was paid, but I have repented it ever since, as I do not consider it has at all added to my respectability to have appeared in that print.

If the unfair use of my name has induced any gentlemen to contribute to it, I am not responsible, and I now trust that this announcement will prevent others from following their example.

I am, &c.

11, St. Thomas-street, Southwark. Samuel Wilks.

POOR-LAW MEDICAL REFORM ASSOCIATION.

Letter from Mr. Griffin.

[To the Editor of the Medical Times and Gazette.]

Sir,—As many of the Poor-Law Medical Officers are anxiously looking forward for some account of the proceedings of the Select Committee on the Operation of the Poor-Law, and particularly so far as the Medical Department is concerned I must again request the favour of space in your columns for the accompanying letter which will explain that Medical evidence will not be taken at present, though I trust it will ultimately be received; but still I cannot disguise the fact that the last paragraph of the note leaves it doubtful. In another letter received from the Poor-Law Board by a gentleman, who tendered evidence, it is stated, "If it shall appear desirable to summon you as a witness before the Poor-Law Committee, you shall receive a further communication in the course of a few weeks." I regret this delay, though it may have its advantages, as it will enable some of my brethren to think over the evidence they wish to tender.

In the House of Commons last Friday, "Mr. Beecroft asked the President of the Poor-Law Board why the Poor-Law Board did not cause to be carried out by Boards of Guardians their instructions to remunerate the Poor-Law Medical Officers? Mr. Villiers said he had some difficulty in answering the question, because the Hon. Member assumed as a fact that which he, Mr. Villiers, did not know was the fact. The remuneration proceeded on the same principle as the payments of the other Union Officers, or at any rate he was not aware of any difference." I believe the above quotation to be the correct one, but as it is differently stated in five morning papers I cannot vouch for its accuracy. Mr. Beecroft evidently referred to the fourth resolution of the Select Committee of 1854 on Medical Relief, which says, "They also recommend that the Poor-Law Board should direct their attention to the salaries of the Medical Officers, which, in some cases, appear to be inadequate to the duties they are required to perform."

As Mr. Villiers does not know what Mr. Beecroft says is a fact, I will here relate that there are 1174 Medical Officers, whose salaries are so low, that if they are divided by the number of patients attended, they will average less than three shillings per patient, and yet some of these live many miles distant from the residence of the Medical Officer, and the average duration of their illness is over twenty-one days, and if those in the permanent list be included, and such ought to be the case, the period will be over three weeks. Of these 1174, 141 actually receive salaries so small that they average less than one shilling per patient, and some are as low as three pence.

I will not trespass further on your space, but to urge on the Poor-Law Medical Officers to continue their efforts, and lay before the Committee such a mass of evidence as will overwhelm the Poor-Law Board, and compel the Government to bring in a Bill to amend the present disgraceful system of Medical Relief to the Poor.

I am, &c.

12, Royal Terrace, Weymouth, March 11, 1861. Richard Griffin.

Poor-Law Board, Whitehall, March 5, 1861.

Sir,—I am directed by Mr. Villiers to say that the Poor-Law Committee held its first sitting to-day. As the inquiry to be made by the Committee is of a very extensive character, it is not expected that any evidence will be received upon the subject of Poor-Law Medical Officers before the lapse of some considerable time; and you will receive a further communication in due course if it should be determined hereafter to require your attendance as a witness.

I am, Sir, your obedient Servant,

Richard Griffin, Esq. John Thornely.

INDUCTION OF PREMATURE LABOUR.

Letter from Dr. Greenhalgh.

[To the Editor of the Medical Times and Gazette.]

Sir,—From the report of my observations at the last meeting of the Medico-Chirurgical Society, it might be inferred that I had induced artificial premature labour only five times; whereas, I merely intended to express an opinion of the beneficial effects of the ergot of rye in the five cases to which I made reference.

It would further appear that I had a personal knowledge of the case alluded to under the care of Dr. Hugh Lee. Such, however, is not the case. The late Dr. Sweatman, who

General Summary of the Payments to the Medical Officers individually of each Union, Parish, or Incorporation under the Poor-Law Amendment Act, when divided by the Number of Patients attended.

Divisions.	3d. to 1s.	1s. to 2s.	2s. to 3s.	3s. to 4s.	4s. to 5s.	5s. to 6s.	6s. to 7s.	7s. to 8s.	8s. to 9s.	9s. to 10s.	10s. to 11s.	11s. to 12s.	12s. to 13s.	13s. to 14s.	14s. to 15s.	15s. to 16s.	16s. to 17s.	17s. to 18s.	18s. to 19s.	19s. to 20s.	20s. to 60s.	Imperfect.	Total Medical Officers.
1. Metropolis	48	66	27	14	9	3	2	3	0	1	0	0	0	0	0	0	0	0	0	0	1	4	178
2. South Eastern Counties	13	63	70	83	50	50	44	18	6	15	5	3	5	3	0	1	0	0	1	0	2	30	462
3. South Midland Counties	12	41	61	57	49	38	25	19	17	8	5	3	5	0	0	1	0	0	0	0	2	13	356
4. Eastern Counties	21	42	64	69	53	30	19	21	5	5	3	3	2	2	0	1	1	1	0	1	1	11	355
5. South Western Counties	6	32	123	86	63	46	35	17	14	7	6	5	1	1	2	0	1	0	2	1	3	6	507
6. West Midland Counties	15	50	63	65	45	41	22	25	9	12	8	8	6	2	0	2	1	1	0	0	5	6	386
7. North Midland Counties	6	15	39	36	40	31	18	18	13	10	13	7	6	6	4	5	3	4	1	0	7	0	277
8. North Western Counties	6	39	32	30	36	24	20	12	11	8	3	2	3	4	2	2	4	0	0	1	5	7	251
9. Yorkshire	5	19	37	52	44	33	22	23	13	9	15	13	6	5	3	4	3	4	1	2	12	26	351
10. Northern Counties	3	21	31	20	21	14	18	9	9	6	5	6	4	1	3	3	5	1	2	2	7	1	192
11. Monmouthshire and Wales	3	19	32	35	18	23	14	9	9	12	3	1	3	1	3	1	1	0	1	0	1	3	192
	138	457	579	547	428	333	234	174	106	93	66	51	41	25	17	20	19	11	8	7	46	107	3507

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was House-Surgeon to the Hospital at the time of its occurrence, used to mention it in his lectures on midwifery. Again, I am not positive whether the child was born alive—a doubt I expressed at the meeting. Of one fact I am quite certain: that the baby was born without manual or instrumental assistance, to the surprise of all concerned.

I am, &c.

R. Greenhalgh.

76, Grosvenor-street.

ADVERTISING TESTIMONIALS OF MEDICAL ANALYSTS.

[To the Editor of the Medical Times and Gazette.]

Sir,—I doubt not that many of your readers have, like myself, been somewhat scandalised by certain circulars which are at present freely distributed by one of the largest city retail houses, and which exhibit a member of our Profession in what seems to me to be a not very dignified position. I allude to the circular advertisement issued by Messrs. Dakin, tea merchants, of St. Paul's-churchyard. This document states that Messrs. Dakin have "retained the scientific assistance of Dr. Hassall, to aid their own commercial knowledge of the articles they supply." And, subjoined, we find a list of goods, sold by the firm, and warranted by Dr. Hassall. As proof that this use of his name is not unsanctioned by the latter gentleman, a letter from him is enclosed, in which he not only declares that he has examined certain articles sold by Messrs. Dakin, and found them genuine, but hastens to assure the firm, with an eagerness which seems superfluous, and, as the letter was to be used as an advertisement, perhaps hardly decent, that in future he will issue "quarterly reports" on the quality and purity of the various articles sold by them.

Now, Sir, I am perfectly willing to put the most charitable interpretation which it will bear on this questionable proceeding of Dr. Hassall. I am willing to believe that he was instigated to it by a pure and unmixed zeal for the welfare of the public, whom he, doubtless, ardently desires to shield from the treacherous subtlety of the adulterator. Admitting, then, the purity of Dr. Hassall's motives, allow me to suggest to him the inference which a large majority of the public will inevitably draw from his actions, and which I need not suggest to your readers.

But I assert, Sir, that there is an opinion widely spreading in the minds of the laity that Medical experts may be induced to give their opinion on either side of any disputed question, and that their conduct is too often regulated, not by the love of truth and justice, but by the promptings of self-interest, or by the feeling of professional rivalry. It is in this view of the subject, and not with any hostility towards the gentleman to whose conduct I have more particularly referred, that I have been induced to address you. That this remonstrance may not be without its effect is the sincere desire of

Your obedient servant,

Observer.

A NEW SALT OF IRON AND QUININE.

Letter from Dr. Fergus.

[To the Editor of the Medical Times and Gazette.]

Sir,—With your permission, I wish to lay before your readers some particulars relative to a combination of iron and quinine which I have used with very satisfactory results for a great many years.

Iron and quinine are already represented in so many forms that the addition of a new one may be looked upon as an unnecessary undertaking. And it is most true of medicines in general, that a multiplicity of forms is a great evil; but there are certain points in this new combination which seem to me worthy of attention.

It is generally found that a salt of the protoxide of iron is preferable to one of a higher degree of oxygenation: but it is also difficult to obtain an absolutely permanent salt of the protoxide. Perhaps, without exception, the sulphate is the most practically useful of all the salts of iron, owing to the uniformity of its composition. Of the quinine salts, the sulphate is also the most available for general purposes. It is not difficult to form a simple combination of these two sulphates, but the resulting compound is not well fitted for general use. The addition, however, of a certain proportion of sulphate of magnesia, enables us to obtain a salt which is nearly as soluble as the sulphate of magnesia itself—quite unalterable in the solid state, and forming a solution perfectly clear at first, and remaining so for an indefinite period. The iron has no tendency to a further state of oxygenation; the solution has been agitated with oxygen gas, and kept in contact with it for several days, without the least change. A solution of gallic acid tinges a solution of the salt of a light bluish colour, after the lapse of two or three days, and many substances which produce an inky compound with the salts of iron may be mixed with it without causing any change of colour.

The proportion of the three sulphates which has been adopted, is 80 per cent of sulphate of magnesia, 15 per cent. of sulphate of iron, and 5 per cent. of sulphate of quinine, one scruple containing 16, 3, and 1, grains of the respective salts. These proportions have been found the best for general use, and also for the purposes of manufacture. The proportion of quinine may be increased by prescribing an additional quantity which is readily soluble in the solution of the salt.

One peculiarity is especially deserving of notice; namely, that in this combination, the assisting or adjuvant property of both iron and quinine are remarkably developed, the effect of both, particularly of quinine, being heightened in a very marked manner. At the same time, both of the remedies are less apt to disagree with peculiar constitutions which ordinarily refuse to tolerate either iron or quinine. If the heightened power be borne in mind in prescribing this combination, there will be very few cases found in which it will not be suitable whenever either iron or quinine are indicated.

The object of this letter being merely to introduce this combination to the notice of my Professional brethren, it is not necessary to extend it further, and I should have been unwilling to trespass so far upon the attention of your readers, were I less convinced than I am of the value of this new salt.

I am, &c.

Walter Fergus, M.D., Medical Officer and Lecturer on Chemistry at Marlborough College.

Marlborough, February 25.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

Tuesday, March 5, 1861.

Dr. Copland, President, in the Chair.

Dr. Wilks read a Report by himself, and Mr. Durham on Mr. Durham's specimen of

TUMOUR FROM THE SHOULDER,

exhibited at the last meeting. "We have very little to add to the account given at the last meeting. The section showed, for the most part, a white soft mass, emitting on pressure a milky juice, but towards the surface there were portions which had a somewhat firmer texture, and tore with more fibrous fracture. The microscope showed throughout the whole mass nucleated cells, but these cells in the firmer portions were not only rounded, or angular, but were lengthening into fibres. In some parts, indeed, the structure seemed mainly formed of such fibres, with large oval nuclei, or, if the term be preferred, lengthened cells with large nuclei. The specimen is interesting as illustrative of the theory that there are different grades of cancer, or of new growths in general, and that, in this particular instance, the fact of the structure not being composed of simple rounded cells, but lengthened ones, gives it a place in the scale just below that of the most marked forms of cancer, although it scarcely reaches to the next grade, which has a distinct name—the recurrent fibroid—and which, indeed, it somewhat resembles in its external aspect. It is to be lamented that no written record remains of the first tumour, which was removed about a year before; but it is believed to have been recurrent fibroid. If this were positively determined it would show that in its re-growth it became somewhat altered in character, becoming, indeed, a

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degree more malignant, as evidenced by its general aspect and microscopical character."

Dr. HARE read a Report on Dr. Part's specimen of

ENLARGED SPLEEN.

It weighed ninety-three ounces, measured seven and a-half inches in breadth, and was three and a-half inches thick at the thickest part. Its shape generally was that of a flattened ovoid. The anterior edge, though thicker than natural, was considerably thinner than the posterior one. Attached to the lower end of the spleen, yet at its posterior surface, was a splenculus of the size of a small peach. The neck by which it was united, although only three-eighths of an inch in diameter, consisted of true splenic substance. The general colour of the spleen was a purplish red, but some parts were darker coloured than others. The peritoneal covering was in parts thickened, especially above, where it was firmly attached to the diaphragm. The peritoneum was also much thickened at two points where there were depressions in the surface of the organs, and here, on section, the substance underneath was seen to be of a distinct yellowish colour, quite different from that of other portions of the organ. This peculiar appearance was found to be due to a deposit in the cellular tissue of a semi-fluid fat, or rather oily fluid. The deposit was not separated by any defined line from the splenic substance, but gradually commingled with it. The organ was free from any cysts, tuberculous, cancerous, or lardaceous deposits. It felt hard externally, but the induration did not extend deeply into the substance. The indurations appeared to be due to a fibrous deposit, which gradually became less and less from the surface inwards, while multitudes of the parenchyma-cells of the spleen—pale cells (white corpuscles of the blood?) and altered blood discs were seen. No appearances not common to normal spleens, were detected, except the indurations mentioned, the parts at the shallow depressions and the evidence of inflammation of the peritoneal covering. Dr. Hare believed that the enlargement was due to chronic hyperæmia affecting the whole organ, but especially its peripheral part, and giving rise to a chronic inflammatory condition, with deposit of fibrous matter and a thickening of the peritoneal covering, which over a rather large surface had formed strong adhesions to the diaphragm, and also that the fibrous deposit had undergone fatty degeneration.

The PRESIDENT remarked on the frequency of enlargement of the spleen in tropical countries. A person who was much emaciated in the rest of the body would often have his abdomen as large as that of a pregnant woman.

Dr. C. J. B. WILLIAMS had seen five or six cases of enlarged spleen, and in all except one there was some enlargement of the liver also. In all the enlargement had been uniform, and was not attended by the deposition of any new matter. Of these cases only one had ever lived in a malarious district. One of the patients was a marble polisher and another a stonemason. They were both much exposed to cold and damp for lengthened periods. Dr. Williams believed that such continued exposure to cold and damp would have a great share in the production of the disease. It had been found that by immersing kittens in cold water that a temporary enlargement of the liver and spleen was induced. In some of the cases which he had seen there was very little disturbance of the health for some years, and often no pain; but ultimately the patients emaciated, as if the organs had enlarged at the expense of the rest of the body.

Dr. WILKS' experience quite confirmed the views enunciated by Dr. Williams. He had seen many cases of enlarged spleen in which there was no history of malarious affection. He believed that the enlargement of the spleen in ague was due to a mere engorgement. In those cases which Dr. Williams mentioned in which the liver also was enlarged, he should imagine that the disease was ladarcious.

Dr. BRISTOWE's experience would also confirm the conclusions arrived at by Dr. Williams and Dr. Wilks.

The PRESIDENT stated that in Guinea and on the west coast of Africa enlargement of the spleen was the most common affection. It was attended with general emaciation and anæmia. Under proper treatment the organ would diminish, but would often enlarge again and again. Not unfrequently the liver was also enlarged at the same time.

Mr. DAVIS had been for five years resident on the coast of Africa. The enlargement of the spleen was very common, and always, he believed, associated with intermittent and remittent fever.

Dr. SCHULHOFF had seen a case in which the spleen was much enlarged, and in which the enlargement entirely disappeared after profuse hæmorrhage.

Dr. DAVIS exhibited a specimen of

MALIGNANT ULCER OCCURRING IN A CICATRIX.

It was taken from the body of a man, aged 81. He had been for ten years under observation and treatment. The ulcer was in the cicatrix of a wound—lower third and anterior aspect of the right leg—originally received at Trafalgar in 1805. It remained in an indolent condition for years. Within the last four years it became more irritable, and gradually assumed the appearance of the fibrous ulcer, so well described by Dr. Smith in the *Dublin Quarterly Journal of Medicine* for May, 1850, the warty tumour of cicatrices of Mr. Cæsar Hawkins, and the warty ulcer of Marjolin, 1828. (*Dict. de Médecine.*) There was the same arrangement of the granulations, which were composed of fibres, in layers parallel to one another and perpendicular to the surface of the tibia, easily separated from each other by a probe and apt to bleed. There was a thin and offensive discharge, and the patient suffered great pain. The lymphatic glands were not affected. Caustics, such as the dried sulphate of zinc, nitrate of silver, caused great pain, and did no good. Water-dressing answered better, and relief from the pain was afforded by opiates. He would not submit to an operation for its removal. Of late the granulations assumed more the appearance of a cauliflower excrescence. The specimen was removed this forenoon. It was found that the tibia was diseased, the compact tissue absorbed, and the interior of the bone filled with what Dr. Davis believed to be, on examination with the microscope, a malignant growth.

Mr. HENRY THOMPSON considered the specimen to be one of very great interest. He had, two years ago, exhibited a similar one. An ulcer had occurred in an old scar, and the disease had extended to the bone. Amputation was performed.

Mr. NUNN had seen the case mentioned by Mr. Thompson when the ulcer was only the size of a crown piece. Mr. Simon, who was then consulted, advised amputation, to which the man would not then submit.

Mr. Hulke, Mr. Nunn, and Dr. Davis were requested to make a further report on the specimen.

Dr. DAVIS also exhibited a specimen of

STRICTURE OF THE ŒSOPHAGUS FROM MALIGNANT DISEASE.

It was situated at the junction with the pharynx, and engaged the back part of the larynx also. It was removed from the body of a man, aged 69, who five weeks ago presented himself complaining of difficulty of deglutition, hoarseness, and some dyspnœa, which he said had been coming on slowly for some months. He felt that solid food was obstructed at a point opposite the cricoid cartilage, but he could swallow fluids, and his appetite was good. There was nothing apparently wrong with him as far as the eye could detect; and, on carefully exploring the chest, nothing abnormal was observed, except an absence of vesicular breathing over the right chest in front, which, however, sounded clear on percussion. On a very deep inspiration or cough air could be heard entering the lung. A probang and afterwards an œsophageal tube were carefully passed down the œsophagus until arrested by what appeared to be a stricture about the point referred to by the patient. A bougie about a quarter of an inch in diameter was passed through the obstruction. On withdrawing it some bloody mucus adhered to it, which under the microscope showed pavement epithelium, blood-corpuscles, mucus cells, and a great number of irregularly-shaped cells, partly fibrous, partly epithelial. There was no enlargement of the glands.

Mr. Hulke and Mr. Nunn were appointed to report on this specimen.

Dr. GIBB exhibited specimens of

CALCIFICATION OF THE CARTILAGES OF THE LARYNX, INCLUDING THE ARYTENOID,

taken from a man, aged 41 years, who died of pneumonia and disease of the kidneys. He had the atheromatous expression

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during life, and after death the vessels at the base of the brain were found diseased, and a small clot, which had become partially absorbed, existed in the right hemisphere. The cartilages of the larynx were beautiful examples of complete calcification, extending as well to both arytenoid. Calcification in the last is considered to be extremely rare by many pathologists, but Dr. Gibb showed that they were more commonly affected in this way, conjointly with the other cartilages, than is supposed. He referred to isolated examples recorded by different writers, as well as to single specimens in some of the London Museums.

Mr. Canton in alluding to the change in the specimen exhibited by Dr. Gibb, stated, that in his opinion, it was not so much a question as to the age of the patient, as to the age of his constitution. These changes might occur at a much earlier age. When the thyroid and cricoid cartilages were ossified to the extent they were in Dr. Gibb's specimen, the arytenoid would be so also. He had never seen a case in which the arytenoid cartilages were ossified in which the other laryngeal cartilages had not also undergone that change. He added that, so far from ossification of the arytenoid cartilages being of rare occurrence, it was very frequent. It was common, he said, to look on such local changes as pathological specimens *per se*, but it would be found that changes of the same kind were going on in other parts of the body. They were closely analogous to the changes in the arterial system, which accompanied them, and in the neighbourhood the arteries would be found in a state of extensive fatty degeneration. He would add that this series of changes was not necessarily associated with age. They might occur in the young; and, again, persons at very advanced life might be almost entirely free from them. Thus Mr. Canton had found in the dissection of the body of a man who died at the age of 103, that the cartilages of the ribs and larynx were scarcely ossified at all, and the heart and arteries were quite free from fatty degeneration. The man had been able to walk out until a week before his death, which followed an accident.

Mr. Durham believed that the idea that ossification of the cartilages was rare had arisen simply from the fact that they were not often examined, except in cases in which death had followed from actual disease of the larynx. As a Demonstrator of Anatomy he frequently had occasion to examine the laryngeal cartilages, and he very often found that they were ossified.

Dr. Gibb also presented an illustration of

LARYNGITIS IN A WHITE-LIPPED PECCARY,

which died in the Zoological Gardens in the latter part of February. The animal was observed to have great difficulty in swallowing its food, which it subsequently refused, and then died. The entire fauces were found red and inflamed, with extension of the inflammation to the entire larynx, which was of a dark purplish red colour, interspersed with ashy-grey patches. In spots the mucous membrane was in a sloughy condition, and readily peeled off. The posterior surface of the epiglottis was bright red, and the lips of the glottis were in a state of œdema; the animal evidently died of acute laryngitis.

He also exhibited

CARTILAGES OF WRISBERG IN THE LARYNX OF A MONA MONKEY.

The larynx of a Mona monkey was also shown by Dr. Gibb, as exhibiting a considerable development of the cuneiform or Wrisbergian cartilages in the fold of mucous membrane between the arytenoid cartilages and epiglottis. These small bodies are known to be either very minute or wholly wanting in man.

(To be continued.)

Medico-Chirurgical Society of Glasgow.—At a Meeting of this Society held on Tuesday evening, in the Faculty Hall, the following gentlemen were elected office-bearers for the ensuing year, viz.: *President* — Professor Pagan. *Vice-Presidents*—Dr. Watson and Dr. Paxton (Kilmarnock). *Council*—Mr. John Reid, Dr. Howatt, Dr. R. D. Tannahill, Dr. Paterson, Dr. McKinlay, (Paisley,) and Dr. G. H. B. Macleod. *Secretaries*—Dr. Lyon and Dr. J. G. Wilson. *Treasurer*—Dr. John Coats.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, March 6, 1861.

Dr. Tyler Smith, President, in the Chair.

Dr. Borham exhibited an apparatus by which an abdominal bandage might be tightened gradually, as occasion required. He also showed a pair of forceps for extracting the secundines, etc., in cases of abortion.

Mr. Albert Napper read a paper "On Defective Formation of Skin around the Umbilicus; Plastic Operation."

A paper, by Mr. Baker Brown, was read, on

FIBROUS TUMOURS OF THE UTERUS TREATED BY SURGICAL MEANS.

The author began by stating that, on December 7, 1859, he had read a short paper before this Society, "On a Case of Fibrous Tumour of the Uterus, illustrating a Surgical Operation for its Cure;" and he then promised at some future time to publish the results of his further experience with that operation—a promise he now proposed to fulfil. He did not intend to detail the operative measures resorted to, as they had already been sufficiently described in the previous paper, nor did he intend to enter into the pathology of uterine tumours, his object being to elucidate the success of a particular plan of treatment by an appeal to the results of experience. At the same time he thought fit to preface his subsequent remarks by stating that the lady, whose case was recorded in the previous paper, had continued ever since in robust health; and, to prevent any misunderstanding respecting the class of tumours for which Mr. Brown proposed a remedy, he stated that it was only of intra-uterine fibrous tumours of the non-pedunculated form, growing from the inside of the uterus by a broad base, that he intended to speak.

Case 1.—*Intra-uterine Fibrous Tumour, of Seven Years' Duration—Operation—Cure.*—A. E. F., aged 35, unmarried, admitted into the London Surgical Home, April 4, 1859, in a state of great prostration and anæmia, complaining of occasional sickness, pain in the epigastrium, and flooding at intervals of a fortnight, lasting for a week each time. On examination, Mr. Brown found a fibrous tumour, as big as a fist, within the uterus. On May 25, her health being improved, Mr. Brown incised the os uteri, which had the effect of checking the hæmorrhage, except at the menstrual periods, (which occurred every three weeks). On October 27, the patient having been for three months in the country, Mr. Brown gouged a piece out of the tumour. This second operation had the effect of breaking up the growth. At every catamenial period she had increased pain, which Mr. Brown ascribed to increased determination of blood to the uterus at these times. This pain and discharge attending the dissolution of the tumour ceased in February, 1860; and on the 21st she was discharged cured. Mr. Brown had heard from this patient that she continues well, takes vigorous exercise, and menstruates regularly both as to time and quantity.

Case 2.—*Intra-uterine Fibro-Cystic Tumour—Operation—Relief.*—C. N., aged 30, married, admitted into the London Surgical Home on May 19, 1859; mother of three children; had suffered from excessive lochial discharge and frequent hæmorrhages since her first confinement, the latter being abated during the time she was suckling, and recurring when she weaned her child. Two years since the birth of her last child she felt a tumour in the abdomen, which has increased in spite of much Medical treatment. On admission she was quite anæmic, the abdomen enlarged, and a leucorrhœal discharge from the uterus. Under tonic treatment, etc., the latter disappeared; but she had a severe attack of hæmorrhage, continuing, in spite of styptic treatment, for nine days. October 1.—Left the Home better in health, and menstruating regularly. May 27, 1860.—Re-admitted; extremely weak, and almost bloodless. During her absence from the Home she had been pretty well till February, when she lost at one menstrual period three pints of blood, the hæmorrhage recurring every eight or nine days till re-admission. Tonic treatment and generous diet. July 5.—Mr. Brown divided the os uteri; the tumour could be felt just inside it. This operation stopped the hæmorrhage, and on the 26th Mr. Brown broke down the tumour with sharp-

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pointed scissors. This had the immediate effect of lessening the tumour, which was passed away in lumps, with an offensive discharge. She had symptoms of pyæmia in August, which readily succumbed to treatment. December 10.—She left the Home, the tumour exceedingly diminished, and causing no inconvenience. February, 1861.—Patient in good health, stronger daily, and able to perform her usual home duties. Menstrual discharge very moderate. Since this paper was written, Mr. Brown saw her. She had had a fresh attack of hæmorrhage, and has since been re-admitted to the Home.

Case 3.—Intra-Uterine Fibrous Tumour—Operation—Death.—J. M., aged 46, unmarried, admitted into the London Surgical Home in November, 1859. Has suffered from fibrous tumour twelve years. It is now the size of a six months' fœtal head, causing great uneasiness, and frequent desire to micturate. On examination, the hymen was found almost imperforate; os and cervix normal. November 19.—Mr. Brown operated in the presence of Dr. Hall, Davis, and Messrs. Charles Mann and P. H. Harper. Mr. Brown divided the os and cervix, and finding the tumour imbedded in the left side of the uterus as low as the os internum, he cut through the capsule, gouged a piece out, and broke down its tissue. Little hæmorrhage. 20th.—Rigors occurred, pyæmia set in and progressed, pus was effused into the pleura, and the patient died on the tenth day after the operation. Post-mortem examination showed diffused purulent infiltration. Concerning this case, Mr. Brown remarked that the fatal termination was due to having gouged the tumour at the same time that he incised the os, and in addition to having broken down the hymen. He had determined in future to divide the operation into two stages.

Case 4.—Intra-Uterine Fibrous Tumour—Operation—Cure.—E. B., aged 41, married, no children, admitted into the London Surgical Home February 18, 1860. Had suffered for four years from hæmorrhage and consequent debility. On examination a fibrous tumour was diagnosed. February 27.—The os uteri incised. May 7.—The patient having improved in health, which had been indifferent since the last operation, the tumour was freely incised in its centre, and the vagina as usual plugged with oiled lint. There was an offensive sanguineous discharge for two or three weeks; the tumour gradually diminishing. June 20.—Catamenia appeared in nearly normal quantity. July 7.—Left the Home. Mr. Brown had since heard from this patient. She can take exercise without pain or annoyance, and has no return of the hæmorrhage.

Case 5.—Mrs. M——, admitted into the London Surgical Home November 16, 1860, having been sent to Mr. Brown by Messrs. Alfred Cooper and Paget, of Leicester. Is a widow; had been married eight years and a half; without children. Has lost much blood at each menstrual period during the last five years, but only discovered an enlargement of the womb two years ago. This had increased rapidly during the last few months, and she had suffered from a white, watery discharge after each period. On examination, the uterus was found completely retroverted, the os being so close to the pubes that it could not be reached. Within the uterus a fibrous tumour could be felt as large as a fœtus at the fourth month. There was also distinct fluctuation at the posterior wall of the uterus, arising from accumulation of the menstrual fluid. This showed that the tumour was situated on the anterior wall of the uterus. Nov. 29.—Mr. Brown operated in presence of Mr. Paget, Mr. Alfred Cooper, and many other gentlemen. Finding that the os could not be reached, he made an incision in the posterior wall of the uterus, which was very thin, letting out a quantity of fetid sanguineous fluid. The incision was carefully carried up to the os and towards the fundus, taking care to avoid wounding the peritoneum; and the fibrous mass could now be seen and felt. December 29.—The tumour was freely gouged, and consequently greatly diminished. January 24, 1861.—The tumour was again gouged, as it had not disappeared rapidly enough. The tumour decreased to half its size, there being much muco-purulent discharge. February 7.—Mr. Brown again gouged the tumour, the same results following the operation. He had no doubt the tumour would eventually, under treatment, disappear entirely.

Case 6.—Three Fibrous Tumours—Operation—Cure.—E. P., aged 37, unmarried. Seven years before, Mr. Brown had removed a fibrous growth from the uterus about the size of a walnut. Two years ago the patient complained of uterine pains and hæmorrhage. A year since, in consultation with Dr. Ferguson, three fibrous tumours had been diagnosed, growing from the inside of the uterus, near to and on each side of the os internum. January 15, 1861.—Mr. Brown, assisted by Dr. Cockle and Messrs. Philip Harper and Wratislaw, cut through each of the tumours. A muco-purulent discharge ensued. February 15.—On examination two of the three tumours had quite disappeared, and the third was only half its former size. The patient has not suffered from hæmorrhage since the operation.

Remarks.—The cases related, having been selected from the case-books of the Institution with which Mr. Brown was connected, had consequently been under the observation of other Practitioners during the whole course of treatment pursued. Other examples might have been adduced from his private practice, but those related showed—First. That this class of tumours may be destroyed by cutting into and destroying a portion of their tissue; in other words, by gouging a portion out. Second. That this operation could be performed successfully and safely. Out of the dozen or more cases in which this plan had been pursued, Mr. Brown had lost but one, that related in the present paper. Third. That the preliminary division of the os and cervix has in itself the very important advantage of nearly, or quite, arresting the uterine hæmorrhage, the most serious symptom attendant on these tumours. Mr. Brown concluded by adding a few observations on what had been done for these tumours by Dr. Atlee and others, and stated that the principal difference between his plan and that of Dr. Atlee was, that whereas the latter gentleman makes an incision through the capsule of the tumour, with a view to its detachment, and to second this purpose, gives ergot of rye, Mr. Brown aims at the disintegration of the tumour, by cutting into its centre, and breaking it down, thus setting up a process of ulceration, but making no attempt to separate the tumour bodily from the uterine wall.

Immediately after the paper had been read, Mr. Brown showed the instruments which he had been in the habit of using in the operation described in this paper. They very much resembled an ordinary centre-bit, twisted in a spiral manner, with various cutting ends. He had experienced great difficulty in getting these instruments to hold so as to gouge a piece quite out, and had thought something was required to hook the tumour while it was being cut. This idea had been very ably carried out by his friend and colleague, Mr. Philip Harper. This gentleman's instrument consisted of a hollow tube of steel, with cutting knives. Contained in this tube was a hook, which could be pushed through by a spring, and thus grasp the tumour, whilst the circular knives were carried through it by means of a screw. In this way a piece was actually cut out of the tumour. The instrument was graduated, so that by measuring the tumour from without a pretty correct estimate could be formed as to how far the tumour was cut into.

An animated discussion followed, in which Dr. Hall Davis, Dr. Graily Hewitt, Dr. Routh, Dr. Tanner, Dr. Oldham, and Dr. Richards took part.

Mr. Brown replied to the various speakers, and dwelt upon the fact that these operations had been performed in the Surgical Home, with the concurrence and assistance of some or all of his seven colleagues, and particularly of that of Dr. Hall Davis, who had confirmed the truth of these cases during the discussion. Mr. Brown alluded to the fact, that the practice of the London Surgical Home was open to every member of the Profession.

To be continued.)

HARVEIAN SOCIETY OF LONDON.

THURSDAY, MARCH 7, 1861.

DR. SIEVEKING, President, in the Chair.

DR. GREENHOW read a casual communication upon some

CASES OF DIPHTHERIA

which had come under his care in a family in Hertfordshire, in which the importance of the closest scrutiny was urged in a diagnostic point of view, lest this disease

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should be mistaken for croup. Dr. Greenhow thought that cases of diphtheria were likely to occur again in the same family; indeed, such seemed to have been the case in the family referred to. Dr. Greenhow also stated that the diphtheritic membrane extends down the œsophagus into the stomach, spreading by continuity of surface. Paralysis was also stated to be frequently consequent upon diphtheria, sometimes hemiplegia, most frequently paraplegia; the first of these being accompanied with affections of the voice, sometimes lasting for many months. Chorea might also come on after this disease.

Dr. Camps said he was not prepared to make observations on the question, whether diphtheria might be mistaken for croup; but he (Dr. Camps) though that many cases were called diphtheria which were in reality croup.

Mr. Lane brought forward a case of

HERNIA OF THE TESTICLE,

in which abscess also existed. The testicle was removed, although the operation was commenced with the view of saving that organ.

Mr. Browning inquired if cases of this kind necessarily involved the removal of the testicle.

Mr. Lane replied that he thought not when the disease was the result of scrofulous diathesis.

Dr. Camps then read the Paper of the evening,

ON SOME IMPERFECTLY RECOGNISED FORMS OF DISEASE.

Four cases were referred to. The first occurred in a stranger to Dr. Camps, a partner in a flourishing business, who could not give his attention to the duties required of him, but in whom there was no irregular action of the heart; the complexion was sallow, but not jaundiced; the tongue coated, and the skin dry. The treatment in this case consisted of calomel and aloes, with relaxation from business, under which an improvement took place. The patient was also seen by Dr. Bright, who regarded it as one of hepatic derangement. The second case was that of a gentleman in whom the functions of the liver were imperfectly performed; his age was 55. This case was attended with depression of spirits. Dr. Camps was disposed to regard such cases as something more than melancholia, if not real cases of insanity.

Dr. Sieveking did not agree with Dr. Camps in thinking that the cases which had been referred to in his paper were any other than cases of melancholia, in the treatment of which quinine, and not purgatives, would be found most beneficial.

Mr. Browning had seen similar cases to those cited by Dr. Camps, and which he (Mr. Browning) had regarded as cases of dyspepsia, and which resulted in recovery.

OBITUARY.

DR. ADAMS, OF BANCHORY.

We extract the following interesting account of our old contributor, Dr. F. Adams, from the *Scotsman*:—

We little thought when, a few weeks ago, we introduced some suggestions from Dr. Adams, as to the propriety of instituting in our Universities a Chair of Medical History, by calling him the most learned of Scottish Physicians, that we should so soon have to change "is" into "was." When we last saw him, though he looked older than his years, as all weather-worn men do, he was full of vigour and of heart, and seemed to have in him many days of victorious study.

To see so much energy and understanding cut sheer through in its full current, not dwindling away by natural decay, is little less startling than it would be to see his own silvery and impetuous Dee this moment rolling in ample volume, and the next nowhere. For common though it be, there is nothing more strange—nothing, in a certain true sense, more against nature—than to witness the sudden extinguishment of so much intellect and knowledge.

Dr. Adams was not a mere scholar—not merely patient, ingenious, and perspicacious in the study of vocables. His was a robust, hardy, eager nature, hungering after knowledge of every sort, and in the structure of his mind and its bent more like the Scaligers and Bentleys of old than like the mighty but mere word-mongers among the Germans. He was made of the same tough and fiery material as were George Buchanan and Florence Wilson, Andrew Melville, and the huge, turbulent, and intrepid Dempster—men who were scholars, and a great deal more—shrewd, and full of public spirit—men of affairs as well as of letters. It is this intermixture of shrewdness and fervour with hard-headedness and patient endurance of mental toil, so peculiarly Scotch in its quality and in its flavour, which makes a man like the country Surgeon of Banchory-Ternan worthy of more than a passing notice.

Francis Adams was born in the parish of Lumphanan, on Deeside. His father was a gardener, and his elder brother is still a farmer in that parish. In a memorandum of his literary life now before us, he says:—"As far as I can think, my classical bent was owing to a friendship which I formed when about fifteen years old, with a young man a few years older than myself, who had enjoyed the benefits of an excellent education at Montrose, which gave him a superiority over myself that roused me to emulation. In early youth I had been shamefully mistaught. I began by devoting seventeen hours a-day to the study of Virgil and Horace, and it will be readily believed that such intense application soon made up for any early deficiencies. I read each of these six or seven times in succession. Having mastered the difficulties of Latin literature, I naturally turned my attention to Greek, as being the prototype of the other. It was the late Dr. Kerr, of Aberdeen, who drew my attention to the Greek literature of Medicine, and at his death I purchased a pretty fair collection of the Greek Medical authors which he had made. However, I have also read almost every Greek work which has come down to us from antiquity, with the exception of the ecclesiastical writers—all the poets, historians, philosophers, orators, writers on science, novelists, and so forth—my ambition always was to combine extensive knowledge of my Profession with extensive erudition."

It was no ordinary boy of fifteen who would work seventeen hours a-day to make up to his friend. He settled early in life in the beautiful and then secluded village of Banchory-Ternan, to use his own words, "with its glassy river and magnificent hills rising in front and behind, like another Tempè, with its Peneus flowing between Ossa and Olympus." Here he spent his days in the arduous and beneficent profession of a country Surgeon, out in all weathers and at all hours, having the lives, the births, and the deaths of a wild outlying region in his hands. This work he did so thoroughly that no one could, with a shadow of justice, say that his learning lessened his readiness and his ability for the active duties of his Profession in the full round of its requirements. He was an attentive, resolute, wise Practitioner, just such a man as we would like to fall into the hands of were we needing such aid. He was always up to the newest knowledge of the time, but never a slave to any system, or addicted to swear by any master. The whole cast of his mind was thoroughly free and self-sustained. If he had any idols, they were among the mighty dead; but even they were his companions rather than his guides.

The following is a list of Dr. Adams' principal publications: and if we remember that during all this time he was fighting for a livelihood, and involved in the multifarious and urgent duties of a "Gideon Gray," they furnish one of the most signal instances of the pursuit and mastery of knowledge under difficulties, to be found even among our Scottish worthies:—

1. "Translation of Hero and Leander, from the Greek of Musæus, with other Poems, English and Latin." Aberdeen, 1820.
2. "*Hermes Philologus*, or the Connection of the Greek and Latin Languages." London, 1826. This made him many literary friends, among other Edmund H. Barker, author of Dr. Parr's Life, and Dr. Anthon, of New York.
3. Various papers on "Greek Prosody," etc., in the *Classical Journal*.
4. "On the Administration of Hellebore among the Ancients."
5. "On the Nervous System of Galen and other Ancient Authors," 1829, in which the originality of Sir Charles Bell's doctrines was attacked.
6. "On the Toxicological Doctrines of the Ancients."
7. "On the Treatment of Malignant Ulcers of the Face."
8. "Notices of the Greek, Latin, and Arabic Medical Authors," for Barker's edition of Lemprière.

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9. "Paulus Ægineta," translation of first volume. 1834. This was a losing concern as to money, but it placed him, *per saltum*, in the first rank of learned and judicious Physicians; it was an amazing *tour de force* for an Aberdeenshire Surgeon, and will ever remain a memorial of his indomitable mental pluck and strong sense. The Sydenham Society gave its character as follows:—"Replete with learning, and comprising the most complete view that has ever been given of the knowledge possessed by the Greeks, Romans, and Arabians; it will form a lasting monument of the industry and erudition of its author, and an honour to his country."

10. Several reviews in "Forbes' British and Foreign Review," 1842-44.

11. "Case of Dislocation of the Knee-joint, with Dissection."

12. "English and Greek Dictionary" (Dunbar's), almost entirely done by him. The Appendix, containing scientific explanations of the Greek names of minerals, plants, and animals, is, out of sight, the most valuable existing in any language.

13. "Paulus Ægineta," 3 vols., 1845-6-7, published by the Sydenham Society.

14. A series of papers on "Uterine Hæmorrhage."

15. Case of a Woman bitten by an Adder.

16. A series of papers on the "Construction of the Placenta."

17. "On the Treatment of Burns."

18. "Hippocrates," 2 vols., 1849. Translation of the entire works, with preliminary discourse and annotations. This is Dr. Adams' *magnum opus*, and is a marvel of industry, exact learning, shrewdness, and judgment. We do not know anything so good anywhere as the introductory essay on the Origin of Grecian Medicine, the sketch of the life of Hippocrates, and the disquisition on the authenticity of the different Hippocratic treatises, and on the physical philosophy of the ancients.

19. Assisted Dr. Greenhill, now of Hastings, in editing "Theophilus de Fabricâ Corporis," Oxon, 1842.

20. "Arundines Devæ," a collection of original Latin poems.

Since that time there have been frequent communications to the journals on Medical subjects, and a pleasant paper on the study of Ornithology read before the British Association at Aberdeen.

Nothing can better illustrate his noble appetite for knowledge of all sorts than this curious and touching record of his own and of his son's observations on the Birds of Banchory and of Cashmere. You see what a keen and loving eye the father had kept, during his busy and learned life, upon the natural objects he met with in his rides, and the training he had given his son in such studies at home, which enabled him to turn to good account his Indian observations. This modest but remarkable paper contains not only the Ornithological notes, but an admirable pleading for this branch of Natural History as a branch of a liberal education, and a valuable gymnastic for the senses and the mind, and ends with an eloquent and, we think, well-founded protest against the scientific ultraism of the day,—the useful-information and cramming mania. We wish we had space to give some of his words of admonition and warning. We may make it, by-and-by, the subject of separate consideration. The following are Dr. Adams' remarks in the memorandum already referred to, on his two great works:—"I began the translation of 'Æginetа' in the end of November, 1827, and finished it on the 28th April, 1829. I never at any period of my life underwent so much literary drudgery, and during three months I sat up late and rose early, and snatched every minute I could from the duties of my profession. At that time my practice, though not lucrative, was extensive, especially in the obstetric line. I arranged, however, to work at my translation ten hours a-day. . . . . I finished the translation of Hippocrates in about four months. The certainty of obtaining a fair remuneration for the trouble it cost me, and that it would not be a light hid under a bushel, made this by far the most delightful task I ever engaged in. The reception of it was everything I could desire. It cost me some professional sacrifices, but this was amply made up by the delight and mental improvement it conferred on me."

Such is a hasty and imperfect sketch of the character and works of this remarkable man, who well deserved the title of *Doctissimus Britannorum*. Some years ago, when travelling through that noble and beautiful region, we went across from the inn at Banchory to introduce ourselves to the translator of the divine old man of Cos. We found him at breakfast, ready for his ride up the Feugh, and amusing himself with pencilling down a translation of an ode of Horace into Greek verse!

He was a thorough Aberdonian—hard-headed and warm-hearted—canny and yet independent—a man of thought and action, not less than a man of vocables and learning—in politics an old and thorough Liberal—generous in his praise of others, and not unpleasantly fond of their praise of him. By the sheer force of his intellect and his erudition he became the cherished friend of such men as Sir John Forbes, Dean Milman, Sir William Hamilton, and many of the famous Continental scholars; and he leaves behind him in his own Profession no equal in honest, deep, and broad learning, in combination with practical sagacity and experience.

MEDICAL NEWS.

LIST OF ENTRIES IN THE LOCAL REGISTER FOR ENGLAND, FROM JANUARY 31 TO FEBRUARY 28, 1861:—

Date of Registration.	Name.	Residence.	Qualification.
1861 Feb. 7	Beckett, A. B.	Whitchurch, Shropshire	L.S.A. Lond. 1860
1861 Feb. 14	Brown, C.	Tweedmouth, Berwick-on-Tweed	M.D. Univ. Edin. 1860; L.R.C.S.E. 1860.
1861 Feb. 15	Brown, J. B.	Sunninghill, Berks	M.R.C.S.E. 1860
1861 Feb. 11	Carpenter, R.H.S.	Carr Villa, Durham	L.S.A. Lond. 1860
1861 Feb. 11	Donovan, J.	London	L.R.C.S.E. Edin. 1860; L.R.C.P.E. 1860
1861 Feb. 2	Duce, J.	Wednesbury, Stafford-shire	M.R.C.S.E. 1860
1861 Feb. 15	Duke, F.	Buckingham	M.R.C.S.E. 1849; L.S.A.Lond.1849
1861 Feb. 19	Eland, J. L.	69th Regt. R. N. G. Militia	M.R.C.S.E. 1836
1861 Feb. 12	Fennell, E. H.	33, Castle-street, Holborn, London, E.C.	M.R.C.S.E. 1859; L.S.A.Lond.1856
1861 Feb. 6	Fewkes, J.	Barrow-upon-Soar, Leicestershire	L.S.A. Lond. 1860
1861 Feb. 1	Gilbert, R. H. T.	23, Upper Phillimore-place, Kensington, London, W.	M.R.C.S.E. 1861
1861 Feb. 4	Gimson, W. G.	Witham, Essex	M.R.C.S.E. 1860; L.S.A.Lond.1860
1861 Feb. 23	Hatherly, N. C.	Assistant-Surgeon, Royal Navy	M.R.C.S.E. 1845; L.S.A. Lond. 1856; M.D. Univ. K. Coll. Aberd. 1857
1861 Feb. 8	Heslop, A.	Kirkoswald, Penrith, Cumberland	M.R.C.S.E. 1859
1861 Feb. 20	Hodgkinson, J.W.	Ovenden, near Halifax, Yorkshire	L.F.P.S. Glasgow 1860
1861 Feb. 2	Johnson, A.	26, Blossom-street, York	M.R.C.S.E. 1861
1861 Feb. 19	Jones, J.	Pen-y-Bont, Abergele	M.R.C.S.E. 1854
1861 Feb. 25	Keene, R.	Laurel-cottage, Shepherd's-bush, London	L.S.A. Lond. 1836
			L.S.A. Lond. 1860; M.R.C.S.E. 1861
1861 Feb. 5	Kough, J. O'B.	The Infirmary, Shrewsbury	L.S.A. Lond. 1856
1861 Feb. 27	Lewis, F.	Hill-top, West Bromwich, Staffordshire	M.R.C.S.E. 1860
1861 Feb. 12	Major, E. W.	Exeter, Devon	M.R.C.S.E. 1860
1861 Feb. 9	Masters, W. H.	Yeovil, Somerset	M.R.C.S.E. 1860; L.S.A.Lond.1860
1861 Feb. 26	Meade, H.	Bradford, Yorkshire	M.R.C.S.E. 1830; L.S.A.Lond.1836
1861 Feb. 18	Parker, J.	Wincanton, Somerset	L.S.A. Lond. 1829; M.R.C.S.E.1830; M.D. Univ. K. Coll. Aberd. 1848
1861 Feb. 25	Parry, R.	15, Abbey-road, St. John's-wood, London	L.S.A. Lond. 1827; M.R.C.S.E.1828; Ex. Lic. 1840, M. 1859, R.C.P. Lond.
1861 Feb. 16	Porter, J. H.	Portland-street, Cheltenham	Dipl. Med. Surg. Vienna, 1838
1861 Feb. 28	Rischanck, A.	56, York-terrace, Regent's-park, London	L.F.P.S. Glasgow, 1860
1861 Feb. 27	Scott, A. M.	Bulman village, Newcastle-on-Tyne	M.R.C.S.E. 1853; M.D. Univ. St. And. 1853
1861 Feb. 5	Sinclair, E. M.	Assistant-Surgeon, 97th Regt.	M.R.C.S.E. 1860
1861 Feb. 5	Steele, Charles	4, Sunderland-place, Clifton, Bristol	M.D. Univ.Ed.1840
1861 Feb. 22	Turnour, A. E.	Park cottage, Denbigh	M.R.C.S.E. 1840
1861 Feb. 19	Wallis, A. W.]	Great Northern Hospital, King's-cross, London	M.R.C.S.E. 1860
1861 Feb. 6	Wollaston, T. G.	Shrewsbury	L.S.A. Lond. 1861

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APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, March 7:—

Fenn, Edwin, Ardleigh, Essex
Watson, Forbes, Nottingham.

The following gentlemen also on the same day passed their First Examination:—

Bright, James Albert, Cambridge-square, W.
Evans, Thomas Griffith, University College
Gabb, Frederick Edward, St. Bartholomew's Hospital
Jenkyns, Charles, Frederick-street, Gray's-inn-road
Nelson, Samuel, St. Bartholomew's Hospital.

As an Assistant:—

Ambrosse, John David Long, Blisworth, Northampton.

APPOINTMENTS.

CAMERON.—Dr. Cameron, Physician to the Southern Hospital, has been appointed to the Chair of Medicine in the Liverpool Royal Infirmary School of Medicine, which had been rendered vacant by the resignation of Dr. Inman.

JACOB.—Mr. E. L. Jacob, B.A., M.R.C.S., has been appointed Honorary Surgeon to the Birkenhead Hospital and Dispensary.

DEATHS.

BARCLAY.—At Glasgow, James Barclay, late of Killingworth and Leaton-burn, Northumberland, M.D. and L.F.P.S. Glasg., L.M. Glasg., F.C.S., F. Fac. Med. Glasg.

BRADSHAW.—March 9, at Thurles, William Bradshaw, Staff-Surgeon, late 32nd Light Infantry.

EARLE.—February 28, at Cromer, Norfolk, where he had resided for more than half a century, Charles Earle (in practice prior to 1815), aged 84.

MAINGAY.—March 8, at Terminus-terrace, Southampton, Bonamy Maingay, of Guernsey, aged 66.

ROOTS.—March 8, at 2, Russell-square, Henry Shuckburgh Roots, M.D. Cantab., F.R.C.P. Lond., Consulting Physician to St. Thomas's Hospital, aged 75.

THOMPSON.—March 8, John Thompson, of Ripon, Yorkshire, M.R.C.S., L.S.A., aged 46. The deceased gentleman was Deputy-coroner for the Liberty of Ripon, and was mayor of the town during 1849-50.

TIGHE.—March 2, at Millefont-view, Kingstown, Ireland, John Atkinson Tighe, L.A.H. Dub., L.R.C.S. Edin., for many years Apothecary to Dr. Stevens's Hospital, Dublin.

WAKEFIELD.—Recently, Hy. Wakefield, of Russell-square, M.R.C.S. Eng., Surgeon the House of Correction for Middlesex, and to the House of Detention, Clerkenwell.

METEOROLOGY AND ILLUMINATION.—It appears that the difference in the illuminating power of the same gas may vary 20 per cent., when tested at the highest and at the lowest points of the barometrical range in this country, from the effect of the rarefaction of the air alone, without taking into consideration the different densities of the gas at the opposite degrees of pressure.

LONDON FEVER HOSPITAL.—Dr. Tweedie has resigned the Physiciancy, and has been appointed Consulting Physician. Dr. Jenner has resigned the Assistant-Physiciancy. It is understood that Dr. Murchison, the Assistant-Physician, will succeed Dr. Tweedie. These arrangements leave two Assistant-Physicians to be elected by the Governors.

LONDON WATER AND CHOLERA.—The Registrar-General, after giving the well-known facts of the case, says it is "beyond a doubt that the mortality of cholera in London was augmented by the impure water with which the population was supplied. It will be remarked that the quantity of organic matter which was so evidently deleterious in the Southwark water amounted, according to the best existing methods of chemical analysis, to two grains in a gallon in excess of that in the Lambeth water; that is, 2 grains in 70,000 grains, or one part in 35,000. A person who drank a quart of the water would take only a grain of organic matter, and still less of the fatal ferment. Animalcules and muscular fibre have been found in water containing minute quantities of organic matter; it is evident, therefore, that this fluid in rivers, which receive the sewage of towns, must often contain the elements of zymotic diseases, and can never be circulated through a population for any length of time with entire impunity. And water companies may be assured that the purest water is the most salubrious, and that which is likely to retain the firmest hold on the market. It is therefore of the utmost importance to keep strict watch and ward over the quality of this fluid, which is now supplied to the inhabitants of London by companies enjoying a virtual monopoly under an Act of Parliament. The publication of the results of the analysis in the Weekly Tables is perhaps of more utility than the publication of meteorological phenomena, over which public companies have no control."

UTER INSANIOR?—To bleed or not to bleed—that is the question. The late Dr. Gregory writes, in 1800, as follows:—"About 230 years ago an eminent French Physician, Botallus, who was Physician to Henry III. of France, wrote a famous book on blood-letting, in which he maintained that it was the best of all remedies, and proper in every disease, even in a dropsy. Soon after his death a great deal of this blood practice was generally adopted in several countries, but especially in France, where much of it keeps its ground even to this day. Not all the ridicule of Gil Blas has been able to get the better of it. Though the name of Sangrado is Spanish (denoting a bleeding), and though the scene of the adventures is laid in Spain, it is well known that the allusion was to the practice of physic in France. In about fifty years after the time of Botallus, another famous Physician and Medical author, Van Helmont, a Fleming, maintained with still more violence (for he was one of our most spirited and eloquent disputants) that bleeding in any case whatever was downright murder (or, worse, executioner's work, *carnificina*, which, in our language, we have no one word to express). Van Helmont died like a hero, of the consequences of a pleurisy, in which he would not allow himself to be bled. Part of one of his letters, written when he knew he was within four-and-twenty hours of his death, and mentioning that such was his situation, is still extant. "These extravagancies seem to have got the better of the patience of Boerharve himself, whose candour and good nature are unrivalled in physic. He mentions the controversy, and the opposite doctrines of the two great leaders in it; but without designing to refute them, or attempting to reconcile them, or to argue with them, very properly dismisses them both with a smart kick on the breech, conveyed in two Latin words—*Uter insanior?* which is the maddest?" Times have changed, although the old controversy has turned up again. The "spirited and eloquent disputant" of the day belies his own teaching, gets bled for a pleurisy like a hero, and—recovers; and the solidly thinking rank and file of the Profession only smile at the fussiness of the chief disputants about a question which they have settled long ago without a word.

VITAL STATISTICS OF LONDON.

Week ending Saturday, March 9, 1861.

BIRTHS.

Births of Boys, 1066; Girls, 1006; Total, 2072.
Average of 10 corresponding weeks, 1851-60, 1798·9.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	622	657	1279
Average of the ten years 1851-60	652·1	641·0	1293·1
Average corrected to increased population ..	..	..	1422
Deaths of people above 90	..	4	4
Deaths in 15 General Hospitals	35	32	67

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1851.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	376,427	..	5	13	..	8	3	2
North ..	490,396	1	10	2	5	20	5	3
Central ..	393,256	..	4	9	3	11	6	2
East	485,522	..	3	6	3	21	7	2
South ..	616,685	1	4	7	2	17	7	6
Total	2,362,286	2	26	37	13	77	28	15

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NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dr. Simpson's Thirty-seventh Lecture—On Amenorrhœa—is in type.

Dr. West's two Lectures on Cerebral Symptoms Independent of Cerebral Disease will appear in early numbers.

An Edinburgh Doctor.—1. We do not consider that the supplying medicines without charge is degrading to an M.D. 2. Universities are educating bodies which give degrees to persons who have undergone a certain course of training, and have shown themselves possessed of the required amount of learning. When they have acquired their degree, they are free to do anything not criminal. A Master of Arts may make blacking, or a Doctor of Civil Law keep a druggist's shop or a tavern, and a M.D. may be a flunkey if he choose. 3. Medical Corporations are associations of persons possessing certain privileges, under various Charters or Acts of Parliament, and having the power, within certain limits, of making Bye-Laws for their own government. If a Corporation (for example the Honourable Society of Gray's Inn, or the Royal College of Physicians,) have a Bye-Law that no member shall keep an inn or dispense medicines, they have, we believe, the right to do so. Whether any given Bye-Law be reasonable and fair, or not, is not here the question. Yet it may, generally, be fairly assumed that the Bye-Laws of such Corporations, although inconvenient to a few individuals, are yet framed in such a way as to enhance the general welfare and dignity of members.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Will any of your correspondents inform me whether any prize is being offered, in any quarter, for the best Essay on the Anatomy, Physiology, and Pathology of the Thyroid Body? A reply will greatly oblige.

I am, &c. A. B.

A QUERY FOR THE POOR-LAW BOARD.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Two Medical men (both registered) are candidates for a Medical district of a Union; both reside in the same district, but one is a F.R.C.S. merely, the other a L.R.C.P. Edin., and L.R.C.S.E.

(1.) Are both equally qualified in point of Law to hold the appointment? (2.) Or would there be a preference shown to the L.R.C.P., he having a Medical as well as a Surgical Diploma? I am, &c. QUÆRENS.

VITRIOL DRINKING.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—During the autumn of last year, when Assistant to Mr. Sanger, of Alfriston, I attended a man in a neighbouring parish, bootmaker by trade, who, for nearly ten years past, has been in the habit of taking large doses of sulphuric acid, and now constantly takes a tablespoonful of the strong acid in a small tumbler of water at a time.

For the last ten years he has suffered from frequent attacks of dyspepsia, his liver being constantly out of order, and, at the recommendation of an old woman, he took a few drops of sulphuric acid in water, which so relieved him, that he got into the habit of taking it frequently, gradually increasing the dose to half-an-ounce, which he now often takes twice in twenty-four hours. Thinking it might be the acid sulph. dil. he had been diluting, I asked him to let me look at it; he gave me a bottle, the contents of which I examined and found, without doubt, it was the strong oil of vitriol. On making enquiries of the Chemist, he told me he had been in the habit of constantly supplying the man with the strong acid.

I tried to persuade the poor man to give up taking it, but could not prevail, for he said it relieved him better than any medicine, and at the same time kept his bowels regularly open. His wife told me that in the summer he rarely omitted taking a dose every morning, often more than the tablespoonful of acid at a time, and frequently repeated it.

Thinking the above will be interesting to some of your readers,

I am, &c.

Ditchling, near Hurstpierpoint. B. G. EVERETT.

SCARLET FEVER AT HARROW.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Having been educated at Harrow School, and feeling the deepest interest in everything connected with that great seat of learning, allow me to remark on a paragraph in your Journal of last Saturday, mentioning the circumstance of scarlet fever having broken out amongst the boys there.

I have been induced to make every inquiry relative to its extent and results, in order that I might remove the alarm created, and explain the reason for the measures adopted. The following information, which has been procured by me from the best source, may be relied upon, and, I think, fully justifies the decision of the Head Master, inasmuch as his object for deferring the breaking up of the school until the Easter holidays can only arise from the great interest he feels in the welfare of the boys, independent of the risk of infection which might be incurred in so many families by the immediate return of them to their own homes:—

It is true that scarlet fever broke out amongst the boys resident in the Head Master's house only, about six weeks ago, and that one case proved fatal, which induced him to disperse his lot; it is true that an epidermic rash, without any sore throat or feverish symptoms, has appeared in other boys, but in no instance sufficient to confine them to their beds, and which has *in toto* abated.

Now, Sir, considering the elevated spot of Harrow, where the air is so pure and bracing, and where the drainage is complete, I do not think that an epidemic could adhere to its walls any length of time, or diffuse its poison through its usual channels.

I may just add that I was an *Alumnus Harroviensis* upwards of eight years, and cannot call to my recollection any instance of fever having broken out in the town. I am, &c.

7, Woburn-place, Russell-square. G. LEWIS COOPER, F.R.C.S.

COMMUNICATIONS have been received from:—

Professor SIMPSON; Dr. WEST; Dr. WILKS; Mr. TOYNBEE; Mr. WYATT; Mr. WILDE, Dublin; Dr. GREENHALGH; Dr. CROFT; REGISTRAR-GENERAL; Dr. LANKESTER; Dr. WILSON, Glasgow; Mr. GRANTHAM; Mr. RUMSEY; Mr. BARNES; Mr. H. C. WOODS; REGISTRAR-GENERAL, Edinburgh; Mr. SLATTER; and Dr. MCWILLIAM.

APPOINTMENTS FOR THE WEEK.

March 16. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

ROYAL INSTITUTION, 3 p.m. Dr. E. Frankland "On Inorganic Chemistry."

18. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

ROYAL INSTITUTION, 9 a.m. M. P. B. Chaillu "Personal Narrative of Travels in Western Central Africa."

MEDICAL SOCIETY OF LONDON, 8½ p.m. Clinical Discussion.

19. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Professor Owen "On Fishes."

ROYAL COLLEGE OF SURGEONS OF ENGLAND. Professor Savory "On the Physiology of Food."

20. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

21. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Professor Tyndall "On Electricity."

HARVEIAN SOCIETY OF LONDON, 8 p.m. Mr. Hornidge "On the Action of Ozone on Organic Compounds."

22. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

ROYAL INSTITUTION, 3 p.m. Professor H. D. Rogers "On the Origin of the Parallel Roads of Glen Roy."

EXPECTED OPERATIONS.

Westminster Hospital.—The following Operations will be performed on Tuesday next, at 2 o'clock:—

By Mr. Holt—Resection of Hip; Necrosis of Tibia; Nævus of Forehead; Stricture of Urethra.

By Mr. Hillman—For Phymosis.

King's College Hospital.—The following Operations will be performed this day (Saturday) at 2 o'clock:—

By Mr. Fergusson—Amputation of Leg.

By Mr. John Wood—For the Radical Cure of Hernia.

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2nd. To assist members with information and advice in the purchase and sale of Practices.

3rd. To raise a Benevolent Fund by devoting to that object the profits arising from the general operations of the Society.

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"JOHN PURSELL, M.D., F.R.C.S.E.

"Kennington Park, Surrey, February 12, 1857.

"To Mr. T. B. Brown."

"Army Medical Department, January 16, 1847.

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(a) Bulletin de l'Académie de Med. 1850, page 1015; Gazette Médicale, Aug. 17, 1850; Union Médicale, Aug. 15 and 22, 1850; Gazette des Hôpitaux, March 15, 1853, and June 10, 1854; Gazette Hebdomadaire de Médecine et de Chirurgie, Aug. 31, 1855; Revue de Thérapeutique Médico-Chirurgicale, Feb. 15, 1855; Abeille Médicale, Revue Clinique; Repertoire de Chimie et de Pharmacie; Annuaire de Thérapeutique pour 1851, page 199; Orfila, Elements of Chemistry; Mialhe, Chemistry applied to Therapeutics, 1856, p. 319; Quevenne, Essay on the Physiological and Therapeutical Action of Preparations of Steel, page 97, 1854; Brichetau, Treatise on Chronic Diseases seated in the Respiratory Organs; Soubeiran, Treatise on Pharmacy; Dorvault, Officine, &c. &c.

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ORIGINAL LECTURES.

LECTURES
ON
THE SPINAL CORD,
DELIVERED AT
The College of France,
DURING THE SUMMER SESSION 1860,

By M. CLAUDE BERNARD,
Member of the French Institute; Professor of General Physiology at the Faculty of Sciences, &c.

LECTURE X.

ON THE EFFECTS PRODUCED ON THE MUSCULAR SYSTEM BY THE CESSATION OF NERVOUS INFLUENCE.

Summary: Intervention of the Muscular Element in all the Phenomena of Nervous Action—Is Contractility a special and distinct Property of Muscles, viewed apart from the Nerves which animate them?—Opinions of Authors—Kühne's Experiments—The Question answered in the Affirmative—Variations of Muscular Irritability—Rémak's Opinions—M. Duchenne de Boulogne's Experiments—The Views of this Author discussed—Muscular Irritability increases where all nervous Influence has been withdrawn—The Action of Poisons is also more rapid in this latter Case—Properties of Muscular Tissue in Batracians compared with those of the same Tissue in Mammals—The Electric Current of Muscles described by M. Dubois-Reymond, easily demonstrated in Frogs, is also found to exist in Mammals too, when reduced to the Condition of cold-blooded Animals—Various Experiments on this Subject.

GENTLEMEN,—In the preceding Lectures, it has been our principal object to examine with you the chief modifications which arise both in sensitive and in motor nerves, when separated from the central organs of the system; but in all the phenomena of nervous action, the muscular element plays an important, nay, an indispensable part. Whether the properties of the motor fibres, or those of the sensitive apparatus, are under consideration, the muscles invariably remain the ultimate agents through which all the symptoms that attract our notice are produced; involuntary contractions, in the first place, and manifestations of pain, in the second. Such are the data on which all our physiological knowledge rests, as far as the nervous system is concerned: the muscle, in short, is in every case the only witness whose testimony enables us to ascertain the powers of the corresponding nerve. In order, therefore, to form a correct estimate of the great function to which the present Course is devoted, we cannot dispense with examining, in their turn, the modifications exhibited, under various circumstances, by muscular irritability viewed in itself.

The first difficulty which meets us at the very outset of these studies, is the following:—Does muscular contractility exist independently of nervous influence? The question has already been answered in a previous part of this Course, and you are familiar with our notions on this subject. In speaking of the effects produced by certain poisons—woorara, for example—we showed you that a complete paralysis of the nervous system did not affect the special properties of the muscular tissue, and that contractions, although no longer produced by the application of ordinary stimuli to the disorganised nerves, were readily called forth by direct excitation. The reverse is equally true; for the muscles may also be poisoned without affecting the nerves. The recent experiments of M. Kühne have thrown a strong light on this subject; this ingenious observer has latterly discovered that a variety of substances, which stimulate contraction in the muscles, when placed in contact with their tissue, exert no influence whatever upon them, when applied to the nerves: nitric and hydrochloric acids belong to this class; in other cases the effect can only be produced by placing the stimulus in contact with the nerves, and not with the muscular tissue. The question, therefore, appears to have met with a complete solution at last; and it can no longer be doubted that the two systems are reciprocally independent, although closely connected with each other. As, however, several authors, both in France and abroad, still believe the contrary, we shall seize, as we proceed, the opportunities which may offer of discussing their opinions.

Let us now examine the principal conditions which produce variations in the intensity of muscular power. The principal stimuli employed for the purpose of provoking contraction in the muscles, are in general capable of acting upon both systems at once; but a prodigious difference will be found to exist between nervous and muscular excitability, under the influence of the same agent. Let us take galvanism, for instance: you are aware that the nerves are acted upon by currents infinitely less powerful than those which are required to set the muscles in motion when directly applied. This striking inequality gives rise to singular results in practice. M. Rémak concludes from his own experiments that there is no such thing as muscular irritability; and that in order to produce contractions in a muscle, on the living subject, the stimulus must be applied to the point where the chief nerves penetrate into its tissue; it has been, in fact, experimentally proved that when muscles are galvanised in such a manner as to avoid comprehending the nerves within the circuit, contractions do not take place, at least during life; and, if the reverse occurs after death, the result belongs, according to M. Rémak, to the class of post-mortem phenomena, and ought not to be taken into consideration, when the properties of the living muscle are being discussed. However indisputable the fact may be, we do not concur in the view brought forward by M. Rémak, as far as its explanation is concerned; a difference of intensity is the only great cause of this apparent inertia of the muscular tissue. In the human subject, to produce *direct* contractions by means of galvanism is next to impossible, on account of the insufferable pain experienced by the patient; but in animals, we have ourselves ascertained that the direct application of galvanism to the muscles does provoke contractions, provided the currents employed be sufficiently powerful. In our earlier experiments we failed in obtaining this result, through the insufficiency of our galvanic apparatus, which, although capable of acting upon the nerves, was unfit to make an impression on the muscles; but, in a second series of researches, we succeeded in proving (by means of a powerful apparatus) that the only difference between nerves and muscles, in this respect, resides in the superior excitability of the former.

M. Duchenne de Boulogne, in his researches on the medical application of electricity to the locomotive system, had observed that in every individual muscle there exist certain points, on which it is desirable to apply the poles of the apparatus, in order to derive as much benefit as possible from the current employed. These points, as M. Rémak has shown, correspond to those in which the nerves penetrate into the muscular tissue. We have just stated in what manner these results are to be interpreted, according to our judgment; but M. Duchenne, in pursuing his labours, has arrived at conclusions which we do not consider orthodox. He believes that in certain pathological cases the muscle loses its irritability and grows indifferent to galvanism, although still capable of obeying the impulse of the will. These morbid deviations must, in our opinion, also be referred to the different degrees of intensity which the properties of all tissues exhibit in health and disease. It stands to reason that a much stronger dose of any given stimulus may be required to provoke contractions in a diseased muscle than in a sound one. We are besides aware that the power exerted over the muscles by the electric fluid in the chief regions of the body varies to a considerable extent. The respiratory muscles hold the first place in the scale of excitability, and the involuntary fibres occupy the lowest. Nor is this difference confined to the muscular system. We meet with it in the nerves, as the preceding lectures have fully proved. Such is, no doubt, the reason for which certain poisons act principally upon the extensors, others upon the flexors, etc. We meet in this case with an interesting application of a general rule, which has often been alluded to.

When separated from the nervous centres, the muscular tissue remains for a considerable space of time in its normal state; but as soon as the nerves have completely lost their vital properties, an augmentation of excitability is observed in the muscles. In this state they grow (like the nerves) more sensible to the action of medicinal and toxic substances. Our experiments on this subject have been chiefly performed on frogs; but similar results are obtained in the higher animals when they have been reduced to the same conditions of life. All the properties exhibited by the various tissues

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in batracians are also found in mammalia; but, being infinitely more evanescent, it is often very difficult to ascertsin their existence. The electric property of the muscles affords a striking instance of this. You are, of course, aware that after cutting off a limb, the principal nerve being laid bare, if its extremity is placed in contact with the inner or cut surface of a muscle contractions are excited in the amputated member, as if electricity had been applied. In fact, this result is due to an electric current which exists in the muscles, and is directed outwards. When separated from the body this outer surface is positively, and their section, or cut surface, negatively electrified. If, therefore, the nerve is placed in contact with the outer portion of the muscle, no effect is produced; but as soon as it touches its cut surface, a current is generated and contractions take place.

[The experiment is now performed before the class. One of the legs of a large and vivacious frog being separated from the body, and the sciatic nerve being laid bare, a big muscle is detached from the other thigh; the extremity of the divided nerve is then alternately placed in contact with its outer portion and cut surface. In the first case, the amputated limb remains motionless; in the second, contractions are at once produced.]

You see, gentlemen, that in frogs this experiment readily succeeds; but in mammals it would almost be impossible to obtain a similar result, without having previously reduced them to the state of cold-blooded animals, on account of the rapidity with which the vital properties disappear in the higher species.

The rabbit now placed before you has been brought to this state, by dividing its spinal cord in the cervical region; the activity of all the functions of life being in this manner slackened, the heart grows weaker, the process of respiration grows slower, and, as a natural consequence, the temperature of the body is reduced by several degrees. As to the paralysis with which the animal is at present affected, it results of course from the division of the spinal cord; but there exist other means of reducing mammals to the state of cold-blooded animals, without superinducing paralysis: we will describe them on a future occasion.

We now introduce a thermometer into the animal's rectum, it marks 27° Centigrade (80° Fahr.), while in the ordinary condition it rises to 38° or 40° (100° or 104° Fahr.) In this respect, therefore, the animal at present resembles a frog. We are now going to amputate a paw, and after laying bare the sciatic nerve, we will endeavour to create contraction in the animal's paw by its own muscular current.

[The experiment is performed, but unsuccessfully. M. Bernard observes that the animal's temperature must fall to 22° Cent. (71° Fahr.) in order to insure success. In the present case, it would have been proper to wait some time longer. The Professor concludes by promising to repeat the experiment before the class on a future occasion.]

ORIGINAL COMMUNICATIONS.

ON

PARASITIC AFFECTIONS OF THE SKIN.

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No. VI.

In my last Papers I endeavoured to show that Favus is a disease which is essentially parasitic in nature; that filthiness is its most powerful predisposing cause; that it is contagious; that it attacks three different parts of the cutaneous envelope,—the orifices of the hair-follicles, the epidermis, and the nails; and that it is *invariably* capable of cure by means of epilation and the application of parasiticide lotions or ointments. I pass now to an affection of a similar type, though very different in appearance, viz.—

Alopecia Areata.

(Disease due to the presence of the Microsporon Audouini.) Tinea decalvans—Porrigo decalvans (Bateman)—Alopecia circumscripta—Pelade—Phyto-alopecia (Gruby)—Ophiasis—Teigne décalvante (Devergie)—Teigne achromateuse—Area (Celsus)—Vitiligo capitis! (Cazenave).

Alopecia areata is one of the most interesting, as well as the least understood, of the parasitic affections of the skin. A disease confined to those parts of the cutaneous envelope provided with hairs, it attacks principally the scalp; but the beard, the genital organs, and the hairy parts are also exposed to its ravages. Although not in any way dangerous to life, it is yet rather an alarming disease from the deformities which it may occasion; sometimes continuing to flourish till every particle of hair on the body is destroyed. The phenomena of this curious disease are best studied on the scalp. It consists essentially of the formation of rounded or oval patches of baldness, sometimes solitary, but more generally multiple. These patches commence, according to Willan, by the production of pustules, which are *very ephemeral*. They have, however, never been seen by other observers; and, indeed, it seems doubtful if Willan himself ever saw them.

On examining the hairs of the affected parts in the early stages they are found to be dull and lustreless, and more easily extracted than healthy ones. The skin from which they proceed is found to be slightly reddened, and it is also the seat of a peculiar swelling having the appearance as if the subcutaneous tissue was œdematous; but it does not pit on pressure, as in true œdema. At this early stage there is a whitish matter on the diseased skin and hairs, which is nothing else than the parasite which occasions the disease. It is not, however, in nearly such abundance as in Herpes tonsurans, a disease which it resembles in many respects. At the commencement itching is complained of, which is generally slight, so much so, indeed, as often to excite little attention, so that the disease is not observed, and continues its ravages till baldness has been produced. This first stage is of short duration, and is followed by the falling out of all the hairs of the affected parts, which takes place very rapidly, leaving a rounded bald patch. By this time the faint red tinge of the scalp has completely disappeared, being replaced, according to Bazin, by a condition exactly the opposite; that is to say, it has become perfectly white, having apparently lost every particle of its pigment. This white colour certainly contrasts strongly with that of the parts of the scalp provided with hairs; but it seems probable that this white colour of the bald patches is not so much owing to any defect of pigmentary secretion as to the loss of the roots of the hairs. After the hairs have fallen out they are replaced by a number of fine short downy ones, resembling the down on the cheeks of infants. By-and-by even this down disappears, the slight swelling of the subcutaneous tissue subsides, and we now see merely the rounded patches of baldness, the skin of these parts being smooth and white. The disease is often very limited, there being only one small patch on the scalp; but more frequently there are several, and these, at first small, have a great tendency to increase and involve the neighbouring healthy parts by circumferential extension, so that at last a number coalesce, forming one large patch, having a serpentine form; hence the name ophiasis sometimes applied to this affection. In this way the whole of the scalp may be attacked, and permanent baldness produced. Instances have been met with, as before observed, of the complete removal of the hair from the scalp, eyebrows, beard, and genital organs, so that not a single hair remained. A case of general alopecia is recorded by Hardy, who states that when the disease is so extensive the system is apt to become involved, and an arrest of development in children produced (a). According to Bazin, the nail may also be attacked, and a very interesting case of the kind is thus reported by him:—"A Physician caused to be brought to me, at the St. Louis Hospital, his nurse's child, about 10 or 12 years of age, affected with *pelade ophiasique* (the serpentine-shaped variety of alopecia areata) of three months' standing. This child's head was studded all over with bald patches. Upon two fingers of the right hand a notable alteration of the nails was detected, which had a great resemblance to that produced by the tricophyton. At the free extremity of each the longitudinal striæ were separated from one another, giving them a very ragged appearance. On the body of the nail, beneath the superficial lamellæ, small yellow spots were remarked, which followed the course of the longitudinal striæ. With the aid of the microscope, these spots were

(a) "Leçons sur les Maladies de la Peau," par le Docteur Hardy. Deuxième partie, p. 177.

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found to be formed by the *microsporon Audouini*, which was also detected in remarkable abundance upon the hairs which were submitted to microscopic examination" (b).

Causes.—From what has been already stated, it will be seen that the true alopecia areata is regarded as a disease of parasitic origin, being due to the presence of a fungus, detected by Gruby in 1843, and named the *microsporon Audouini*. It consists of spores and filaments, the former very small and not very numerous, the latter in greater abundance. These are found on the skin, mixed with epithelial scales, in the early stage of the disease, and they are also to be met with on the downy hairs at a later period. In the interior of the hairs they are also met with (See Fig. 10), being collected into little bundles, and causing remarkable swellings of

FIG. 10.

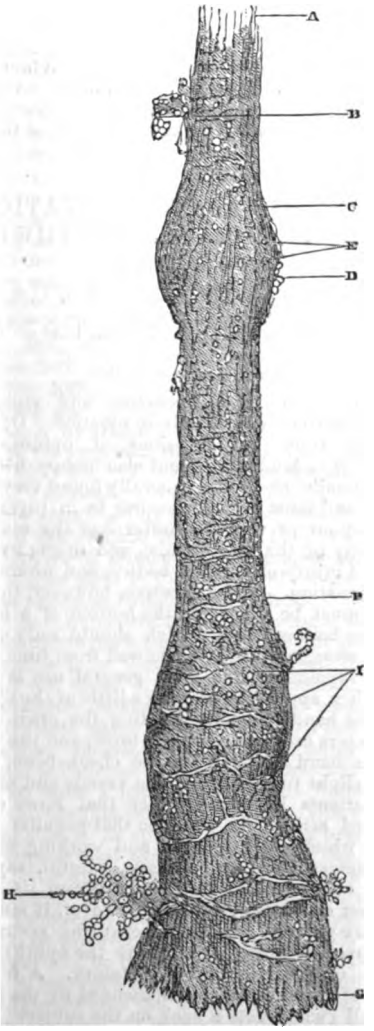

FIG. 10.—A F, lower part of the hair; F G, root of the hair without capsule; C, spheroidal swelling of the hair, due to the accumulation of spores, E, between the longitudinal fibres of the hair; D, rupture of the longitudinal fibres; I, spores and tubes of the parasite; H, bunch of spores; G, rupture of the root.—(Bazin.)

the hairs. Their bulbs also are *distinctly atrophied*—a peculiarity which is so marked as to be seen almost without the aid of a lens. Many dermatologists in this country, as Startin, Hutchinson, and Jenner, are of opinion, that the disease consists in atrophy of the bulbs alone, which, they say, accounts for the falling out of the hairs. This is, to a certain extent, true no doubt, but we must go further, and find out the cause of the atrophy; and this is satisfactorily explained by the detection of the parasite, the presence of which is denied by them.

(b) "Leçons Théoriques et Cliniques sur les Affections Cutanées Parasitaires," par le Docteur Bazin. 1858. P. 204.

There are some who doubt the contagious nature of alopecia areata; and in an excellent report of cases of this disease, by Hutchinson, I find that one of the propositions deduced from the cases recorded is, "that alopecia areata is totally incapable of spreading by contagion" (c).

That it is as contagious as Herpes tonsurans (ringworm of the head) no one can assert, but it is pretty certain that it sometimes is so transmitted. Hardy states, for instance, that he had lately a patient who, on the advice of his Physician, retained in his service a domestic affected with alopecia areata, and who, since then, had been affected with the disease on his beard (d). Gibert relates the following case:—"A little boy, nine years old, affected with porrigo decalvans, was brought to me by his mother. According to her account, the disease only commenced fifteen days before, at a boarding-school, where several of the pupils were succesively attacked after exposure to contagion from another boarder who was affected with it, and who had introduced it into the establishment. On the child, brought for examination, there existed, above and a little behind the ear, towards the back part of the left parietal region, a spot, the size of a five shilling piece at the most, deprived of hair, and covered by little greyish scales. These little scales, accompanied by a little itching, were only developed *consecutively* to the alopecia. The first thing which struck the mother was the baldness of that portion of the scalp as if it had been shaved" (e). Gibert also quotes the following case which was observed by M. Gillette, of Paris:—"Four months ago, a pupil, 12 or 13 years of age, arrived from the country at one of the Royal Colleges of the capital. The day after his arrival, a bald spot, about an inch in diameter, was detected on the side of the head in front of the ear. The Physician of the establishment examined it, saw nothing suspicious in it, and thought that he could live with the other pupils with impunity. After fifteen days, the pupil who sat next him, was found to have likewise a bald patch of nearly the same size without any premonitory symptom. Since, then, six other pupils in the same room have become affected, and always suddenly, but in no case, was the patch of baldness more extensive than that mentioned" (f).

These cases are surely sufficient to prove that alopecia areata is a contagious disease, and that children so affected should be separated from their companions. Little is known with regard to the predisposing causes, except that it is much more frequent in children than in adults. Thus, of 42 cases cited by Hutchinson, 28 were in persons under 15, and 14 above 15 years of age (g). In adult males it is not unfrequent on the beard.

Diagnosis.—When the disease is fully formed, the diagnosis should be very easy. The patches of circular or oval form, either completely bald or covered with small downy hairs, are not to be mistaken, and the microscopic characters of the hairs, the atrophy of their bulbs, and the detection of the parasite, confirm the diagnosis.

In the earlier stages, when there is only slight swelling and redness of the scalp and alteration in the characters of the hairs without any baldness, there may be some doubt, but generally other patches may be seen on other parts where the disease is further advanced which will clear up the difficulty.

To avoid error, however, it merely requires to be mentioned that cases have been met with of the occurrence of patches of Herpes tonsurans and alopecia areata on the head at one time. These cases are of course rare, but to avoid any possibility of error, in such a case let the disease develope itself for a few days without interfering in any way, and its true nature will soon be apparent. A mistake in the diagnosis of alopecia areata from Herpes tonsurans is, however, of no great moment in the first stage, the principles of treatment being exactly the same. The disease which has been most frequently mistaken for alopecia areata is vitiligo; but how such a mistake can be made seems quite incomprehensible. Vitiligo as I understand it, is generally a congenital affection which is not confined to the hairy parts of the body, consisting

(c) *Medical Times and Gazette*, February 27, 1858, p 217.

(d) "Leçons sur les Maladies de la Peau," par le Docteur Hardy. Deuxième partie (1859). P. 179.

(e) "Traité Pratique des Maladies de la Peau et de la Syphilis." Par C. M. Gibert. Third Edition. Tome premier, p. 335.

(f) Quoted by Gibert from *Gazette Médicale de Paris*, Vol. vii. (1839) No. 36, page 574.

(g) *Medical Times and Gazette*. February 13, 1858, p. 165.

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of an abnormal distribution of the pigment of the skin, so that there are irregular patches which are quite white and *altogether wanting* in pigment, but are surrounded by skin provided with an excess of colouring matter. When these patches of skin are on hairy parts—the hairs proceeding from the portions deprived of pigment, are similarly affected and are quite grey. What two diseases can be more distinct? I believe that this mistake has only become possible since the absurd name—vitiligo capitis—has been given to alopecia areata, by Cazenave; one of the consequences of a bad nomenclature.

Favus may be mistaken for it, if the former has been subjected to treatment, and the crusts removed. But an attentive examination of the diseased surface will prevent error. For, on the portions of scalp which have been the seat of favus crusts, the integument is reddened and depressed, and the hairs have not necessarily fallen out, whereas in alopecia areata, the scalp is generally quite white and bald, or only covered with a little *down*. If there be any doubt, leave the disease to itself for a few days, when, if it is a case of favus, the little yellow cup-shaped crusts will begin to make their appearance.

The alopecia arising from various affections of the scalp, such as eczema, psoriasis, lupus erythematodes, affections of a syphilitic nature, and alopecia resulting from old age, requires only to be mentioned, and kept in mind, in order to prevent mistaking it for cases of alopecia areata.

The *Prognosis* is not at all serious as regards life, but the disease may cause great deformity, for alopecia areata is the most difficult to cure of all the parasitic affections of the skin. If the disease is seen early, it can easily be prevented from extending further, and by careful and patient treatment, the hair may generally be made to grow ultimately as well as before. If all the hair-follicles of the body have been destroyed, the disease, of course, ceases, but it often stops short spontaneously, and the hairs grow as beautifully as ever. So that if the disease is less under the influence of remedies than the other parasitic cutaneous affections, it has the advantage over them in ending more frequently in spontaneous cure, and this, therefore, renders the prognosis less serious.

Treatment.—Let us suppose that we have a circular patch of alopecia areata on the scalp: the first thing to be done is to prevent it from extending. This is to be done by causing all the hairs within a couple of lines of the circumference of the patch to be carefully extracted. For those at the edge are very frequently, to a certain extent, impregnated with the parasite, though not so much as to render the depilation difficult; or, if not actually diseased, they are very apt to become so, as the affection spreads by additions to the circumference of the patches, and they are therefore much better away. The head, also, should be washed daily with black soap, as cleanliness is of great consequence in affections of the head, and the hair should not be kept too long. We must now apply ourselves to the diseased surface. All the downy hairs—if there are any, which is not invariably the case,—are to be removed; and this must be effected very carefully, according to the rules already laid down, for they are exceedingly friable and very apt to break off, leaving the diseased roots in their follicles. This depilation of the downy hairs must be persevered in and continued till the healthy hairs begin to make their appearance. Along with the depilation of the downy hairs, and of the hairs surrounding the diseased patch, a parasiticide lotion or ointmnet must be applied. One of those already alluded to (under tinea tonsurans) should be used daily, and probably the bichloride lotion, or alcohol, as recommended by Küchenmeister, is the best. The whole head may also be occasionally washed with one of these solutions, so as to destroy any of the spores which may be entangled in the hairs but have not had time to take root. If the disease is far advanced, and no down is seen on the bald patches, the application of a blister may be made, as is practised by Jenner and Startin, and is sometimes useful, but it must be repeated to be successful. A common fly blister may be employed for this purpose, or the acetum cantharides or collodium vesicans. The acetum cantharides should be applied, on a sponge, to the part, and produces vesication in about ten minutes or a quarter of an hour. The collodium vesicans (h), a mixture of equal parts of collodium and ether cantharidalis, should be applied with a glass brush, and two scruples are sufficient to blister a surface the size of the palm of the hand.

The vesicant which I am in the habit of using most frequently is a strong solution of the bichloride of mercury (a drachm of the bichloride dissolved in seven drachms of alcohol). A piece of blotting-paper may be soaked in this solution, and applied to the part affected for five minutes; after which, cotton wad is substituted for it, and vesication is certain. There is no danger of salivation, as some might suppose.

Instead, however, of vesicating the affected parts, we may confine ourselves to the application of the more slowly acting parasiticide lotions or ointments, and to circumferential depilation; but very frequently, although we may thus prevent the disease from extending, we cannot cause the hairs to grow on the bald patch, for, when long left to itself, the parasite destroys the hair-follicles, and permanent alopecia is the result.

It is necessary, at the same time, as the disease is attacked locally, to attend to the general health, to correct any disorder of the system, if such exists, and to endeavour to change that state of system favourable to the growth of the parasite.

(h) "Medicines: their Uses and Mode of Administration." By J. Moore Neligan, M.D. Fourth Edition. Pp. 252.

APHORISMS AND OBSERVATIONS UPON CERTAIN DISEASES OF THE ORGANS OF SIGHT.

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(Continued from p. 170.)

Vapours of two kinds, sedative and stimulant, are frequently prescribed in ophthalmic practice. Of the former, those arising from hot infusions of opium—either the watery extract or laudanum—and also poppy-heads, marshmallow, camomile, etc.,—are generally found very grateful by the patient, and must be had recourse to in private practice. Even the vapour of very hot water has the most soothing effect in many of the ophthalmiæ, and in the irritation produced by the injury of foreign bodies, and wherever there is much lachrymation. To be effective, however, the substance vapourised must be placed in the bottom of a long narrow mug, and the boiling water, which should only occupy one-half of the vessel, ought to be renewed from time to time. Of stimulating vapours, that in most general use is the fume of sulphuric ether, applied by pouring a little of the fluid over the hollow of the hand and then holding the open eye over it, while the fingers are applied to the brow, and the wrist or the heel of the hand is fixed on the cheek-bone. Its effect is to cause slight turgesence of the vessels and some lachrymation. Patients labouring under that form of impaired vision termed asthenopia, and also that peculiar affection of the eye, in which, after reading and working for a certain time, it becomes tired or suddenly painful, say that they derive not only comfort but benefit from its application. Like all other empirical remedies, however, it must give way as we acquire greater facilities for ensuring accuracy of diagnosis,—especially now that we have the ophthalmoscope to render such diagnosis almost a certainty. A few years ago the vapour of prussic acid, recommended by the redoubtable Dr. Turnbull (who wrote a book on the subject), was loudly extolled even by those who should have known better. It may be in the recollection of some of my readers that the prussic acid humbug was first exposed in Ireland, both at the Surgical Society and in the pages of our periodicals. A Canadian Practitioner, wishing to break a lance with me on the subject, absolutely wrote a book on the prussic acid cure for leucoma, staphyloma, and glaucoma, as well as for cataract and amaurosis, etc., in which he republished all the criticisms upon his cases which had appeared in the pages of the *Dublin Quarterly Journal!* Like most other remedies of a similar class, the ignorance displayed by its supporters soon broke down the efficacy of the cure with the Profession. Then time, or the death or absence of the prophet of the cure, weans the public from it, as it did from my clever, but not very learned countrymen, Valentine Greatrex and St. John Long. While, however, the delusion of any kind lasts and is popular, it becomes a nuisance, in this wise,—patients come

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and ask your opinion of a new remedy, and if you say it is a humbug, the next question is, "Have you tried it?" If not, no matter how inconsistent the arguments in its favour, or with our present knowledge of pathology and therapeutics, how impossible its action or effects, the ready answer of the patient is, "Oh, then you should not object to it, as you have not tried it." I formerly succumbed to this imposition, and may relate the following anecdote respecting the vapour of prussic acid. With the acid of commerce (Scheele's strength) I gave the remedy a fair trial at the Hospital, and in the presence of the pupils,—as I expected, without any permanent benefit to the patients, although many would be willing at the moment to say they were improved. A great advocate of the remedy having stated that the acid I used was not strong enough, I procured (through the late Mr. Scanlon, of London,) the apparatus and the acid of the strength used by Turnbull. The former consisted of a thick bottle, ending in an eye-glass. The bottle was filled with asbestos, as the best means of procuring the evaporation of the acid. A few days after its arrival, I poured not more than three or four drops on the asbestos, and gave the bottle to a gentleman who had been reading about the "wonderful new cure," and desired him to hold first one eye and then the other over the cup for a few minutes; but told him that if he felt giddy, or in any way uneasy, to desist and ring the bell. Wishing to see what effect the strong acid might have in this case, I went into the waiting-room in a few minutes and found that the gentleman had dropped the bottle, was leaning back in his chair, with his face very red, his eyes staring and congested, his pupils immensely dilated, and his senses somewhat confused, his answers being quite inconsequential. I at once dashed cold water upon him, admitted plenty of fresh air, and then played upon him with cold water from a strong syringe. My friend Dr. Neligan happening to pass by, he lent me his assistance, and we immediately walked him round Merrion-square, by which time he was quite himself. The congestion of the eyes and the dilatation of the pupils continued until next day. I have not tried prussic acid since.

Stimulating Liniments, rubbed over the brows or temples, are frequently prescribed by the General Practitioner, as well as the special Ophthalmic Surgeon. They were more frequently employed in former times than at present, and they still hold a higher place in the opinion of continental authors than in those of Great Britain and Ireland Their object is either to act as counter-irritants or stimulants, or by absorption to influence the nervous system locally or generally. In this country, the most frequently prescribed liniments and embrocations are those of ether and ammonia. I find the compound camphor liniment with spirits of rosemary, and in persons of delicate skins diluted with soap liniment, a very nice application. Should dilatation of the pupil be indicated in the case, belladonna extract may be added by first rubbing it up with a little water, as the liniment will not dissolve it; the tincture is not so effective. This and such like embrocations should be applied particularly over the expansion of the supraorbital nerve, with a bit of flannel, or other woollen cloth, for five or six minutes at a time, while the eye itself is protected by the fingers of the patient's disengaged hand. To produce a beneficial effect, remedies of this nature should be persevered in for a considerable time, but in so doing care should be taken not to break the skin, for many patients are so energetic in the mode of application that they scrub the substance over the whole forehead, and often produce an ugly eruption. I have no faith in sudden vesication of the supraorbital ridge and temple by means of acetic acid, cantharidine, water of ammonia, or the various patent remedies extolled as vesicants, irritants, or rubefacients. In cases of ptosis, especially in children, I have seen good produced by continuously painting the lid and brow with strong tincture of iodine.

Ointments and Pomades applied to the brow and temple may be used in two ways, by simple inunction of the surface or by first removing the cuticle by means of a vescicant and then applying the remedy to the denuded cutis. In this way mercury, opium, strychnia, and belladonna are occasionally employed; and a combination frequently used by Practitioners, especially in cases of internal ophthalmia, is camphorated mercurial ointment with the extract of belladonna. My mind is not quite made up as to the positive amount of good effected by this or other similar applications; but of this I am sure, that belladonna acts best by itself and upon an unbroken surface, while strychnia produces its effects soonest when applied to a raw surface. In cases where its use is indicated, as in mydriasis or paralysis of the muscles of the globe, half a grain of strychnia may be mixed with the ordinary spermaceti dressing, applied night and morning, or a quarter of a grain mixed with a little powdered sugar may be sprinkled on the surface. I may here remark that I never saw a case of amaurosis from defective nervous energy in the slightest degree benefited by the use of strychnia. As already mentioned, our Continental brethren appear to put great faith in the application of pomades to the brows and temple, and of these one of the most celebrated is that formed of the black oxide of copper. How it acts has never been explained, and I am sceptical enough not to believe in its efficacy. In fine, my faith has concentrated upon these two principles—the ointment, pomade, liniment, or other substance used, either acts specifically like belladonna, strychnia, or mercury, the positive results of which are manifest, or they do good in certain cases by acting as irritants, stimulants, or rubefacients. When we consider the vast number of remedies of this nature, which are extolled in general and special works, the foregoing and some of my other observations might imply a want of faith in medicine. Quite the contrary. My faith in medicine increases daily, but my faith in the voluminous Pharmacopœias of the ancients and many of the moderns does not, I confess, increase with years. This may in part be owing to the limited sphere of my practice; but it will be recollected that in the class of affections on which these Aphorisms and Observations are written, we have to deal with every variety and form of disease, acute and chronic, sthenic and asthenic, and arising from just as many causes, local and general, as any other class of affections with which the Physician or Surgeon has to deal, besides occurring at all ages in both sexes in every condition of mankind, appearing sporadically or epidemically, and requiring to be treated individually as in private practice, and in the mass, as in Hospitals and public institutions. While I have thus abridged my Materia Medica to those articles in which I have absolute faith, or which from their general use it is often necessary to prescribe for the patient, every Practitioner must occasionally vary his formulæ. It is a necessity at present imposed by the public on the Practitioner, and to a certain extent will always be so. But it is not necessary now to achieve celebrity or attain position by putting an old lady through the Pharmacopœia, or the Pharmacopœia through her, as I heard, eulogistically expressed of a celebrated Physician many years ago. In addition to the great guns of mercury, opium, antimony, bark, iron, etc., I believe every Practitioner employs a round of small arms, limited in extent; and except when new remedies are introduced and highly recommended in most instances not much increased by experience. In the present day therapeutics seem less studied than formerly—possibly this arises from the greater accuracy of diagnosis and prognosis, and the aid which the former derives from the stethoscope, the microscope, the ophthalmoscope, and other instrumental means of the like instance.

In certain neuralgic affections of the eye and in brow-ague the veratrine ointment will occasionally prove very efficacious. From two to five grains of veratria to a drachm of spermaceti ointment and a few drops of oil is the strength of which I usually employ it. Of this the size of a large pea should be slowly rubbed into the eyebrow at bed time. Its first effect is to cause a sharp stinging sensation like that produced by nettles and lasting from half-an-hour to two hours, but its action both in acridity and duration is very various in different individuals. It does not produce any physical effect upon the skin, and loses its property of producing heat or tingling after a few applications, so that the quantity must be increased from day to day. The alkaloid should be levigated to an impalpable powder before mixing it with the unguent.

Salves, for applying to the tarsal edge of the eyelids in psorophthalmia, and affections of that nature, are numerous and of great antiquity. I find the three following most efficacious:—The red ointment called after the old oculist Janin, composed of white precipitate, impure oxide of zinc, Armenian bole, lard, and oil, is one of the most efficacious in severe forms of the disease, particularly where the angular edge of the lid is becoming rounded off, the red line of the conjunctiva turning over into the skin, the ciliæ disappearing

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and the case running into lippitudo. Before the lard is added, the other ingredients should be levigated to an impalpable powder, and frequently washed, so as to get rid of the slightest grit. The ointment itself is of a very firm consistence, and in cold weather hard; it should be always applied in a melted state, with a stiff camel's-hair brush, and well rubbed into the edges of the lids. Grown persons can effectually apply it themselves with the point of the finger. Care should be taken in melting the ointment not to apply too much heat; it ought to be applied when about the consistence of thick cream. Moreover, if the vessel be put on the fire the mercurial ingredient would be dissipated. All those ointments should therefore be softened by placing the vessel in warm water. In private practice the ointment should be applied at night, just as the patient is going to sleep; but at a public clinique this cannot be effected. Janin's ointment adheres with great tenacity for a long time, and this may be one of the reasons why it effects so much good; it also leaves a pinkish mark for a day or two. The brown citrine ointment, or the ointment of the nitric oxide of mercury, made with rape oil or cod-liver oils instead of olive oil, as the Pharmacopœia directs, and as described by Mr. Donovan, myself, (a) and others, many year, ago, is also a most valuable application, and has the advantage of remaining soft in all states of the atmosphere.

That very useful remedy, Singleton's Golden Ointment, is, I believe, chiefly composed of the nitric oxide of mercury. When I had charge of the Ophthalmic Ward in Dr. Steeven's Hospital, during my apprenticeship, under the late Abraham Colles, the cases of granular lids were treated by inserting under the lid a morsel of warm citrine ointment,—although not for the purpose of killing the granulations, under the belief that they owe their origin to parasites, as was lately propounded. In certain mild cases of tinea palpebrarum the weak zinc ointment is also a useful application, and does not discolour the lids. But, no matter what the substance, its efficacy will mainly depend on its mode of application; and unless the crusts and scabs which accumulate over the little ulcers, and from the minute abscesses, and round the roots of the hairs on the edges of the lids, are determinately removed, in the first instance, by the nail and the use of warm water, it will not be of much use. In many of the severe and neglected cases, especially among the lower orders, the ciliæ must be first removed, and the edges of the lids washed over with a solution of lunar caustic. The late Sir P. Crampton, who was an admirable Ophthalmic Surgeon, and began his Professional career as a writer on that branch of Medicine, was in the habit of prescribing the dilute red precipitate ointment for such cases. In that rare disease in this country, petechiæ lodged at the roots of the ciliæ, strong mercurial ointment I find to be the best remedy.

(To be continued.)

(a) See the author's "Aural Surgery," p. 121.

REPORTS OF HOSPITAL PRACTICE

IN

MEDICINE AND SURGERY.

CONDUCTED BY

JONATHAN HUTCHINSON,

Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital,

AND BY

J. HUGHLINGS JACKSON, M.D.

THE ROYAL LONDON OPHTHALMIC HOSPITAL.

EFFECTS OF LARGE DOSES OF CHLORATE OF POTASH ON YOUNG CHILDREN.

THE two following cases seem worthy of being put briefly on record as instances in proof that young children bear very large doses of the chlorate, even when continued for considerable periods. Both of them occurred at the Ophthalmic Hospital, and one of them several years ago.

Case 1.—Maria T., aged 2½ years, under Mr. Critchett's care, was ordered ten grains of the chlorate three times daily. The prescription was commenced on September 8, and continued until September 29. On the latter date the writer saw the case. The mother of the child stated that the medicine had been given quite regularly, and that it had not in any way disagreed. There had been no purgative action. The child had improved in general health whilst taking it, and had gained a better appetite.

Case 2.—Isabella K., aged 1 year and 8 months, a little delicate baby, suffering from tinea tarsi, with some intolerance of light and general irritability of the eyes, with much mucous secretion. She was admitted under the writer's care at the Ophthalmic Hospital on June 1. The chlorate of potash, in ten grain doses dissolved in an ounce of water, was ordered. The dilute nitrate of mercury ointment was to be applied to the lids. The child continued the mixture in full dose and quite regularly until July 6 (about seven weeks). During this time the bowels were not relaxed, but, on the contrary, on one occasion a purgative powder was required. At the end of the course her health was greatly improved, and her eyes were all but well. Her appetite had improved, and her mother considered that, in all respects, "she had got on quite different since she took the medicine."

These cases, although instances of unusual free administration of the salt, regard being had to the long continuance, are quite in unison with the writer's general experience of the effects of chlorate of potash in young children. It is very rare indeed for it to cause any symptoms of disagreement; now and then, however, it does so, and several cases are on record proving that it requires to be given cautiously if the doses are very large. In a late number of the *North British American Journal*(a) an account is given of an inquest on a man who had been accidentally poisoned by it. In this instance, however, the enormous dose of six drachms daily was administered. The post-mortem conditions were inflammation of the coats of the stomach and softening of the mucous membrane. The symptoms had been severe abdominal pain and vomiting.

DOUBLE IRITIS, WITH DEEP-SEATED DISEASE, IN A SYPHILITIC INFANT.

Mrs. F., a healthy-looking woman, brought her infant for defective sight, on December 11, 1860. I give the account of the case in the same order as it stands in my case-book. She said that immediately after marriage, three years previously, she had "the disease" from her husband. It was followed by rash and sore-throat and falling off of the hair. She was treated by pills and salivation. She said that she got rid of all symptoms eleven months after contracting them, and had had none since. She had been pregnant three times. The first, a girl, was a seven months' child, and was born eight months after marriage. It lived ten weeks, and died with rash, etc., "very bad." The second, a girl, born at six months, lived only forty-eight hours. The third, the present patient, a girl, was, when born, a fine child, and quite clear-skinned. When one month old a rash came out. It had had snuffles from the first. From the time it was a month old it was noticed that its eyes rolled about. It was, when brought to me, six months old. Its eyes had, its mother said, been inflamed and "looked green and bad" several times since birth. She thought the child could see better when a month or so old than it could when I saw it. Lotions had been used, and for the rash a mixture was given, but no powders. When I saw the child she was still fat and well-grown, but was covered over the whole surface with inflamed psoriasis, of most characteristic aspect. She had snuffles. The eyes rolled about. The cornea were a little hazy; the anterior chamber small; both irides steel-gray, and wanting in lustre. Under atropine, the pupils dilated but to a very slight extent, but very irregularly. They were both occluded by thin membrane, of white organic structure. In the left eye, in some directions, a brilliant reflex, of almost metallic yellow-brown was obtained. She was treated by mercurial inunction.

On March 7 I made the following note:—"The child has, for two months past, been quite well, as regards syphilitic symptoms. She does not take notice of light, and appears to see but very little. Both irides are of slate-gray, and wanting in lustre." J. H.

(a) See *British American Journal*, Vol. ii., No. 2., p. 92.

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GUY'S HOSPITAL.

FIVE CASES OF PERINEAL OPERATIONS ON THE URETHRA.

(Cases under the care of Mr. BRYANT.)

The five following cases illustrate some interesting points in the management of urethral obstructions from different causes. In the first two the cause of obstruction was laceration from recent injury.

Case 1.—*Contusion of the Perineum—Hæmorrhage from the Urethra—Subsequent Extravasation of Urine—Catheterism Impossible—Perineal Incision—Recovery.*

A man, aged 53, was admitted on September 5, 1861, for extravasation of urine. The history obtained was, that five days before he fell astride on a log of wood, some hæmorrhage from the urethra was the immediate result, and difficulty in micturition. The day following a catheter was passed and left in for twenty-four hours; it was then withdrawn; retention of urine followed, and as this persisted for two days he applied to Guy's. On admission the perineum was infiltrated with urine. Catheterism was impossible. Many fruitless attempts had been made to pass an instrument, before he was brought to the Hospital, and profuse hæmorrhage had resulted. Mr. Bryant therefore determined to open the urethra through the perineum. He introduced his finger into the rectum as far as the prostate, and then pushed a bistoury into the perineum in the middle line and cut upwards and succeeded in slitting the urethra. He then passed a grooved director into the bladder, and was able, after passing the catheter down the penis into the wound, to guide the instrument into the bladder. On the sixteenth day urine passed through the urethra, the wound healed kindly, and the man was discharged well on September 30.

Case 2.—*Fracture of the Pelvis and Laceration of the Urethra—Catheterism Impracticable—Perineal Incision—Death in Collapse from other Injuries.*

In the preceding case, as we have seen, the operation was performed the day after the accident, and when extravasation of urine had already taken place. In the following, Mr. Bryant preferred to anticipate the extravasation, and, as no catheter could be introduced, he at once proceeded to operate.

A man, aged 50, was admitted for fracture of the pelvis and laceration of the urethra. A cask had fallen on his hip whilst he was laid on one side. He had, luckily, made water about half-an-hour before. When admitted there were evident symptoms of fracture of the pelvis, and ruptured urethra, blood flowing from the passage. There was no extravasation. It was impossible to pass a catheter, and therefore Mr. Bryant opened the urethra from the perineum, cutting down on a grooved staff. The man never rallied, however, from the injuries sustained, and died shortly after. The perineum in this case was opened in order to prevent extravasation of urine taking place, which would necessarily have resulted on every attempt to pass water. After death the ramus of the os pubis was found fractured and the urethra lacerated.

Case 3.—*Indurated Stricture of the Urethra anterior to the Scrotum—Internal Urethrotomy—Recovery.*

A man, aged 23, was admitted under Mr. Bryant's care for retention of urine. On examination it was found that he had a stricture in the urethra just at the root of the penis, and here an induration could be felt. Six months previously he had had gonorrhœa. Mr. Bryant succeeded by force in passing a catheter and thus relieving the retention; but as the stricture was a very tight one, and from its position was very favourable for internal section, he determined to operate on it. He therefore divided it internally by the urethrotome, and was then able to pass a No. 11 catheter into the bladder. It was kept in over a period of five days, after which the patient was able to pass water freely. He was kept in the Hospital a month and was then discharged cured; the local induration having disappeared.

Case 4.—*Stricture and Extravasation of Urine—Free Incisions—Recovery—Subsequent Contraction of the Stricture—Perineal Section—Recovery.*

Robert A., aged 43, was admitted for extravasation of urine consequent on stricture. He had had gonorrhœa twenty years before, but had, he said, never used injections. The urine was effused into the cellular tissues of the perineum, scrotum, and penis, and extended into the abdominal wall. Mr. Bryant freely incised the distended parts, and also made an incision into the urethra from the perineum. He then succeeded in passing a catheter through the opening in the perineum into the bladder. The man rapidly recovered from the extravasation, and micturition was tolerably free, but the urethra subsequently contracted considerably, the passage of a catheter being almost impossible, the whole passage being like cartilage.

On May 2, 1860, chloroform being given, Mr. Bryant performed perineal section. The case did well, and a full-sized catheter could be introduced with ease. A small fistulous opening remained, which proved obstinate. The edges were, however, kept raw by strong liquor ammonia, and a perfect cure resulted, the man making water better than he had for years.

Case 5.—*Retention of Urine in a Boy—Difficult Catheterism—Abscess in the Perineum—Perineal Section—Recovery.*

A boy, aged 9, of good general health, was admitted under Mr. Bryant's care for retention of urine. Before he was brought to the Hospital, many attempts had been made to pass a catheter, but in vain. With great difficulty and with some degree of force, Mr. Bryant succeeded in passing No. 1, and drew off a large quantity of urine. The difficulty experienced was in the scrotal part of the urethra. An abscess formed in the perinæum, and as it was on the next trial found impossible to pass an instrument, Mr. Bryant opened the abscess. Urine flowed from the opening and but a small quantity passed by the penis. The urine all along had been puriform. The opening in the urethra partially closed, but no improvement took place in the passing of the urine by the ordinary channel. Mr. Bryant, therefore, on March 2, performed perineal section. The grooved staff was forcibly introduced. No indurations could be felt at the site of obstruction. On March 9 urine flowed freely through the urethera, and the wound healed, a perfect cure resulting. The cause of stricture in this case was very obscure, indeed it was doubtful whether such existed, and whether the obstruction had not been some congenital malformation of the passage.

FRACTURE OF THE TIBIA—DELIRIUM TREMENS—TREATMENT BY LARGE DOSES OF OPIUM—RECOVERY.

(Under the care of Mr. COCK.)

[Reported by Mr. B. J. TUCK, House-Surgeon.]

The following case shows in a strong light the efficacy of opium treatment, freely pushed, in a case of that form of delirium tremens which often follows injuries. It is probable that the type of disease in question differs somewhat from idiopathic delirium tremens, and partakes in degree of the character of traumatic delirium. It will be seen that the man was by no means deprived of stimulants when admitted. Although such large doses were required, yet the effects of the drug were throughout marked, more especially in the relapses which occurred when it was omitted:—

Henry R., aged 40, an oven-builder, residing in Gravel-lane, Southwark, was admitted on January 16, under Mr. Cock's care, for simple fracture of the upper third of the left tibia, caused by falling down an area upon some bricks. The leg was very much swollen, tense, and painful, and did not admit of the application of splints. It was therefore placed upon pillows and steadied by sand-bags.

He said that his habits were temperate, but as his appearance scarcely justified that assertion, he was ordered full diet and two pints of porter. In the evening he was ordered half-a-drachm of tincture of opium, which procured him a good night's rest.

January 17.—He was apparently going on well until the evening, when he became restless and excited, and was, at seven p.m., given half-a-drachm of tincture of opium. As this produced no beneficial effect, and as he had become more violent, he was, at ten p.m., ordered one drachm of of tincture of opium every hour until he slept, and also twelve ounces of brandy. In five hours he took five drachms of tincture of opium and then became quieter, and at length fell asleep for a short time, having previously partaken of a mutton chop.

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At half-past eight on the morning of January 18 he suddenly got out of bed, standing on the fractured leg. He was with difficulty persuaded to get into bed again, but as he was still very violent and would persist in kicking the injured leg about (which was still in such a condition that the application of splints could not be thought of) he was strapped down, and even then his struggles were so violent that it was necessary to administer chloroform, which was continued for nine hours, as he became violent whenever its influence subsided. During this period six drachms and a-half of tincture of opium and half-an-ounce of antimonial wine were given in divided doses, together with frequent doses of brandy and porter. At seven p.m. he became quieter and partook freely of food, and again fell asleep. When awake he was to take twenty drops of tincture of opium every hour, and to continue the brandy and porter. Owing to a misunderstanding the brandy and opium were not given. The straps were removed.

19th.—In the morning he was very quiet and rational. He took his food and said that he had had his brandy and medicine regularly, which prevented the correction of the error. His bowels were moved to-day, as also on every day since his admission. In the evening he became again excited. One drachm of tincture of opium was given, and it was directed be ·eated every hour if he awoke.

20t Very iet and rational, skin moist, pupil contracted, .lse : all and feeble, tongue moist and tremulous.

21st.—In the morning he was very quiet; he slept well during the night, and his appetite was as good as usual. His bowels continue to be regularly opened. To continue taking the brandy and twenty drops of tincture of opium every hour. At 10 p.m. he was very violent, getting out of bed and threatening all who came near him. His leg appearing to be in great danger, he was with difficulty held down by six men whilst the straps were re-applied. Chloroform was then administered to prevent his struggling, and a drachm and a-half of tincture of opium was given every hour until he had taken ten drachms and a-half. He then slept, and the straps were removed early next morning (22nd.)

22nd, 9·15 a.m.—He again became excited. Two drachms of tincture of opium were given, which quieted him for a short time; but as its influence went off, it was necessary to repeat the dose every two hours for twelve hours, taking half-drachm doses during the intervening hour.

23rd and 24th.—Very quiet. Tincture of opium half-a-drachm every hour; to continue the brandy and porter as usual. His bowels are regularly opened, and his appetite continues very good.

25th.—Apparently much better. To take half-a-drachm of tincture of opium every alternate hour. In the evening he was much excited; he himself requested that the straps might be re-applied. Two drachms of tincture of opium were given twice, and half-a-drachm every hour afterwards.

After the 25th there was no return of the excitement. His appetite was very good, and his bowels regularly opened, although he had taken half-a-drachm of tincture of opium every hour when awake, until February 3, from which date it was gradually diminished.

February 3.—The swelling of the leg having subsided, splints were applied, chloroform being previously administered to relax the muscles, in order that the fractured ends of bone might be placed in apposition, which could not be completely accomplished, owing to the fibula not being also broken, and the manner in which one fragment was jammed under the other.

11th.—Going on well; appetite good; bowels regular; position of fracture improved.

The reporter of the case adds:—It was ascertained that this man never had delirium tremens before, although accustomed to drink very freely, nor was he an opium-eater. It is, therefore, difficult to account for the facts that such large doses produced such little effect unless persevered in, and that his appetite and the action of the bowels were not interfered with. Throughout the whole of the attack his pulse was soft and rapid, but varied in fullness. His skin was moist, but he seldom perspired. His tongue was moist and tremulous, except once for a short time when it was dry, probably from sleeping with his mouth open. His pupils were much contracted during the whole period.

ST. BARTHOLOMEW'S HOSPITAL.

TETANUS FOLLOWING A WOUND OF THE FINGER—REMOVAL OF THE FINGER—TREATMENT BY CATHARTICS—RECOVERY.

(Under the care of Mr. HOLMES COOTE.)

[Reported by Mr. ALFRED CATT, House Surgeon.]

J. P., a small, well-made lad, aged 16, was admitted into "Pitcairn's" Ward on January 17, 1861. He was one of a large family, in very poor circumstances. He was brought to the admission-room on December 21, 1860, exactly a month previously, for injury to the finger. Whilst wheeling a truck, he fell down, the handle of the truck crushing the extremity of his little finger. It was bound up in all its filth by his mistress, who refused to cleanse the wound. From the first it caused him great pain. It was not again dressed for some days. However, he continued to work for three weeks, dressing his finger with a succession of domestic applications. On January 10, a cab knocked him down, the horse's hoof striking him in the back. He quickly got up, and continued to work the remainder of the day. The following night, he states, he lost all pain in his finger, and suffered from cold chills. On Friday, the 11th, he did not get up, feeling stiff and sore from his bruises. On Saturday, the 12th, he was so stiff he could not sit, and experienced some difficulty in eating and swallowing. This condition did not vary much until the night before his admission, which was passed in a very restless state, he being frequently attacked with cramp. He had only been seen once by a Medical man, who gave him two pills. On examination, he was lying on his back. Expression anxious, face flushed, the features contorted, the angles of the mouth depressed, and he spoke through his teeth. The right pupil was rather more contracted than the left. The skin was hot and rather dry. Pulse about 100, small, and sharp. Tongue rather slowly protruded, covered with a white fur, the edges indented, the substance lacerated in places by the teeth. The mouth could be slowly opened to nearly the usual width. The bowels had not acted for six days. The urine had been very scanty and thick. He had lost all appetite. He complained of pain in the back, with loss of power in his legs. He was unable to give any very clear account of himself, the above history being obtained from his mother rather later. The examination of the spine did not show any signs of injury. He was ordered to take three grains of calomel at bed-time and a black-draught in the morning: warm bath; milk diet.

18th.—He passed a very restless night, having, at short intervals, spasms of the whole body, described as "drawing him into a bow," making him quite rigid. He was still lying on his back, but resting only on his buttocks and shoulders, the hand passing readily under the spine, the muscles feeling very tense. The abdomen was hard, the muscles very rigid, relaxing somewhat on gentle friction, which was not painful. He could open his mouth slowly, tolerably widely, and protrude his tongue, which presented the same features as yesterday. His skin was still hot and dry, though he was said to have perspired freely during the night. Face flushed. Risus more marked. His bowels only acted once; the motion was reported to be very dark. He has not passed more than half-a-pint of turbid urine since admission. An attack of general spasm was produced by suddenly touching him. On examining the injured finger, the distal half of the ungual phalanx had separated, leaving a ragged, pale, sloughy surface. A pill of calomel and jalap with two drops of croton oil were given. A croton-oil liniment was rubbed on the back, and a poultice applied to the finger. 11 a.m.—The bowels were well purged, the contents being partly dark scybala and partly fluid bilious fæces. He vomited some frothy mucus. The liniment appeared to give him great pain at the application, inducing frequent spasm, but since he felt easier. Pulse, 180. No perspiration. 12 a.m.—Mr. Holmes Coote now saw him, and decided to remove the finger, which was done, under the influence of chloroform. The wound was rather encouraged to bleed, no vessels being tied.

19th.—2 a.m.—He has come round from the chloroform and has taken an opiate. Pulse, 120. He feels more comfortable. 3 a.m.—He has not yet slept. Repeat the opiate 5½ a.m.—He slept soon after taking the last dose. 9½ a.m.—He con-

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tinued to sleep at intervals. He has taken some milk, but with difficulty. No attack of spasms has been noticed since the operation, but the opisthotonos and rigidity of the abdominal muscles continue. He lies on his right side, supported by pillows. The bowels have acted six times since the croton-oil. He passes but little urine, still very loaded. Pulse 120, small and sharp. Skin cool and dry. Face remains flushed. He takes but very little nourishment. Wound has bled a little during the night, but it has now ceased and is poulticed. He was cupped at the nape of the neck to four ounces, and was ordered a pill containing three grains of calomel and a quarter of a grain of opium every four hours. 10 p.m.—He has passed a quiet day, taking food much better, a little of it being solid. He has not complained of much pain, except when the liniment is applied. At 9 p.m. he took twenty-five drops of the liquor opii, and soon fell asleep. Up to that time no spasm had occurred since last note, but, whilst asleep, on gently taking his hand for the purpose of feeling the pulse, he was thrown into a tetanic spasm, causing him to cry out. The spasm was of short duration, and on its relaxing he fell asleep again.

20th.—He passed a very good night, but his condition has not varied. Ptyalism is established, and the back is covered with vesicles from the liniment. Pulse 110, with rather more power. Tongue covered with a creamy, white fur. Bowels have acted three times; the motions are pale and lumpy. Two drops of croton-oil were now given: the pills and the liniment were discontinued. 10 p.m.—The croton-oil has again acted powerfully, producing healthy, bilious fluid motions. He is most cheerful, though he has not taken his food so well. The urine is more abundant and less loaded. Tongue still furred. Skin rather hotter than natural, and dry. Pulse 125, still rather sharp. He has been sick, vomiting a greenish, acid fluid. A beef-tea-and-brandy injection was administered with a long tube and was retained. He was ordered twenty-five drops of liquor opii, after which he fell asleep. The respirations during sleep were 36, and full drawn.

21st.—He slept well during the night, taking nourishment when he awoke. He lies still on his right side, supported by a pillow, but his back remains much curved, though the abdominal muscles are, perhaps, not quite so rigid. He has some cough; pulse 110; the tongue is cleaning; the bowels have acted this morning; urine is less loaded; he appears cheerful, and states he is not in much pain; the wound of the amputation has almost healed. To omit all his medicines. 10 p.m.—He has had two spasmodic attacks; one came on when he was drinking some cold water. He has taken his opiate, and is now asleep.

22nd.—Slept nearly all night; the trismus appears less, but the opisthotonos is not diminished; his cough is rather troublesome. 10 p.m.—He has had two rather severe attacks of spasm during the day, and as he had not taken his food quite so well, an injection of beef-tea was given at 9 p.m. He is now sleeping tranquilly after the opiate.

23rd.—He was rather restless last night for about two hours, and coughed very frequently, but he is pretty comfortable this morning, his general condition remaining much the same. The bowels have not acted for two days. He was directed to take two drops of croton-oil and two pills of calomel and jalap.

24th.—The bowels acted six times after the medicine, the motions being rather dark and offensive. He has vomited a little frothy mucus. Pulse 110, small and soft; tongue cleaning; his cough is again more troublesome, and he has brought up a little muco-purulent sputum. Rhonchus is heard over both lungs behind. No more spasms have been noticed, and he states that he is free from pain, though his back is still much curved. Fifteen drops of antimonial wine were given every six hours, and a blister was applied to the chest.

25th.—The abdominal muscles are less rigid, the blister has risen well, and his cough is relieved. His bowels are again confined. One drop of croton-oil.

26th.—He had one short spasm yesterday, during which he bit his tongue. He has passed a very good night. Early this morning he had two spasms in succession. His bowels have been well acted on. He has taken his food well. He complains of stiffness in his legs. He was ordered a liniment for his legs.

28th.—Yesterday he was ordered two grains of quinine every four hours. The first dose made him a little feverish, and he had rather a restless night. He is, to-day, however, less rigid. The bowels have acted without medicine. To continue the quinine.

30th.—He can now open his mouth much more easily, and can protrude his tongue more quickly. The muscular rigidity is generally less. He still speaks through his teeth. Last evening he had a troublesome attack of coughing. To continue the quinine.

February 4.—He no longer lies on his side, but flat on his back. He has a good appetite, and can take solid food well; his chief complaint is of weakness. The wound has quite cicatrised. He sleeps well and is very cheerful, but the risus has not yet quite left him.

9th.—He is rapidly regaining his strength, and is allowed to get up. All rigidity has quite passed off; his general health is good.

16th.—He goes out of doors; he is gaining flesh and strength rapidly; the risus has almost disappeared; he will be discharged shortly.

NORFOLK AND NORWICH HOSPITAL.

CALCULUS ENCYSTED IN THE WALLS OF THE BLADDER—LITHOTOMY—RECOVERY

(Under the care of Mr. CADGE.)

D. S., aged 32, was admitted into the Norfolk and Norwich Hospital, under the care of Mr. Cadge, in January, 1861, for symptoms of calculus. Twenty months before he had been cut for stone by Mr. Crosse, when a small cup-shaped calculus was removed. It was evident that it had formed over some projection. When the finger was in the bladder, an enlargement corresponding in size and shape to the last joint of one's finger, was felt not far from the neck of the bladder. For the moment it was thought to be one of those fibrous growths which are occasionally met with attached to the vesical surface of the prostate gland. The patient recovered rapidly, and left the Hospital in three weeks. He remained quite well for more than a year. Symptoms of stone then returned, and on January 25, 1861, Mr. Cadge performed median lithotomy. When the finger entered the bladder it came at once upon the enlargement noticed at the previous operation. Mr. Cadge says:—"Now that I could more fully examine it, I felt sure that it did not belong to the prostate at all. It was too far away from the urethral orifice towards the rectum, and felt like a stone covered by mucous membrane, as it afterwards turned out to be. A loose stone was felt in the bladder." Mr. Cadge determined to remove the loose stone, and then to deal with the encysted one. The forceps, however, grasped the latter, and after one or two slips it was gradually and slowly removed. A small portion of the mucous membrane which covered it was included between it and the blades of the forceps, and came away with it. The calculus was pea-shaped, and had a nipple-like process at the larger end, which protruded through the opening of the cyst into the cavity of the bladder. The portion of the cyst which was removed corresponded to and fitted round the neck of the nipple-like process, and covered besides perhaps a fourth of the stone. The other stone was then removed. It was oval, and somewhat hollowed on one side, but not so much cup-shaped as that which was withdrawn at the first operation.

The operation did not occupy many minutes, and there was but little bleeding. A tube was introduced with a view of diminishing the risk of extravasation of urine which, considering the injury done to the lining membrane of the bladder, must have been considerable. In thirty-six hours the tube was removed, and he began at once to pass water wholly by the urethra. He had little or no pain and made a tea-cupful of water at a time, about every three or four hours. In a few days he was walking about the ward, and a week after the operation he was present in the theatre in order to see the operation of lithotomy on some other patients.

"It may be thought," remarks Mr. Cadge, "that the removal of an encysted calculus, by tearing away a portion of the cyst, was a rough proceeding, but I am satisfied that as little injury as possible was done, probably much less than if I had resorted to the knife to enlarge the opening of the cyst, or any other method. The forceps I am in the habit of using are lined on the inner sides of the blades by linen, which

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gives a smooth muffled feel to any stone, when it is passed, and this accounts for my being unaware that it was the encysted one which I first caught. In all the cases of encysted calculus that I have examined (and they have been numerous) the stone in its cyst has always been found, if I may so say, on the outside of the muscular coat of the bladder, communicating with the interior by a narrow opening. In this instance it lay, I believe, on the inside of the muscular wall, was covered by little more than the mucous membrane, and bulged into the cavity of the organ. This constitutes the singular feature of the case and accounts for the ease of its removal. I am not sure, on looking at the calculi again, that the one which was extracted at the first operation was not a portion of the encysted stone and was broken off the nipple-like process by the forceps."

Medical Times and Gazette.

SATURDAY, MARCH 23.

TAKING A HOUSE.

We have promised to give from time to time some practical remarks on hygiene. Let us resume, to-day, the subject of houses; for this is one in which our Profession, especially in large towns, is in no small degree personally interested. Any one who aims at practice must have a good house in a good street. Patients will not take the trouble to be poring about after some mean lodging in a by-way unknown to coachmen. A man may unluckily have a good house, without a good practice; but he will scarcely have a good practice without a good house. There is something, too, in the reputation of certain streets, sacred to the Æsclepiadæ; and now-a-days, if any great Physician be removed from his earthly labours, his executors are sure to receive offers for the vacant mansion from some rising ornament of the Profession, long ere the out-going tenant is consigned to his resting-place in the cemetery.

Taking a house, then, is a most critical step in the lives of all men, but of the Physician or Surgeon above all. Once fixed in a conspicuous street, his fate is sealed; removal is costly, perhaps ruinous; the public hate trouble, and will not follow Dr. Blank from Apollo-row to the "Street called Straight" and back again. Moreover, the law which protects property is inexorable. A man may get rid of the wife of his bosom, to whom he has sworn eternal union at the altar, but as for a house—so soon as his signature is affixed to the fatal parchment, and with finger on the seal he has "delivered it as his act and deed," there is no Sir Cresswell Cresswell to divorce him from that, though it may be frailer than easy virtue herself, and deserve the name of "deep ditch" more than all the πόρναι whom Solomon ever cautioned young men against.

We could fill column after column with the dismal lamentations of members of our Profession who have planted themselves in costly but unwholesome houses in all parts of Town, and solely for want of knowing the common pathology of houses, and the points to which inquiry should be directed. Dr. Argutus, of world-wide reputation for his contributions to a difficult part of abdominal diagnosis, complains that he took a house that for more than a quarter of a century had been occupied by old Dr. Graveolens and his maiden daughters. No sooner has he settled therein than one of the children is attacked with fever, which is followed by great debility, rendering necessary a long and expensive sojourn by the sea. The health of the other children fails, and it is discovered that "London does not agree with them." Meanwhile, they never enjoy a sweet atmosphere. Sometimes they are invaded especially if they have a party) with a sudden and appalling stench, fit to usher in an apparition of the Evil One; sometimes a faint odour, which robs them of appetite, and colour, and spirits. Meanwhile, with a scattered and sickly household, and expenses of two establishments, there are tremendous bills for fruitless operations of builders. The house is perfectly drained; no benefit results; then it is discovered that part of the premises are the ancient receptacle of the sewage of the next house; and, after that, it is discovered that part of the house is built on a spot excavated from the earth of a contiguous mews, and that cracked walls let in currents of perfume from some subterraneous drains in the neighbourhood on a higher level.

Of course, in such cases, the in-coming tenant receives the bland and conscientious assurance of the out-goers, that the house is remarkably healthy, and "never anything the matter with the drains." We happen to know a house, made over some years ago, by F.R.C.P. to F.R.C.S. in which this last point was literally true, because there were no drains whatever; and the incomer, while arranging the contents of his wine-cellar, was almost engulphed in a cess-pool, into which the floor at that moment happened to sink. Some persons are unconscious of bad air, and others seasoned to it; some like it; besides, the most conscientious people cannot see defects in what they may have to sell, any more than Æsop's owl could in her own offspring. It is in vain, then, for any man who is "looking after" a house, to expect to hear anything against it from those who want to sell it, nor yet from builders or house-agents, who somehow always contrive to get a finger in the pie, and are satisfied be the bargain good or bad for their employer. House-agents, as a class, have the astuteness of the attorney, without whatever conscience an attorney may be supposed to have.

Caveat emptor is the word, then; every man must take care of himself; and we purpose to give him a few plain hints to help him; confessing, as we go on, that we draw our inspiration from bundles of Reports of Medical Officers of Health which have been forwarded to us, and from Lectures or Essays which some of them have published. But we mention no names. Deaths from typhus fever may occur in A.-street or B.-row; but if we were to publish a description of the existing state of those houses, so as to "depreciate the property," an attorney's letter would reach us long ere the sun went down. The law protects property. People who want to protect their lives must look out for themselves.

In the first place, then, we would say, look to the height, or level, of the district in which the house stands. The Ordnance maps, published at Stanford's, Charing-cross, on the scale of five feet to a mile, show the elevation in feet, above a given datum, of every part; there are also contour maps which show the same thing, and on such a momentous question a few shillings are not to be considered. By these maps, we may learn the general elevation of any street; and, of course, *cæteris paribus*, the higher it is the better, although we have known cases of sewer-poisoning on the highest ground about London. There must be in the nature of things some difference between an undulating gravelly hill, rising to 30, or 50, or 100 feet above the level of the river, and the flat swampy meadow, once a tidal estuary, afterwards a river-side marsh, now a dead level, scarcely above high water-mark, with its streets on arches or embankments raised above the mud, and its drainage effected by artifice at low water only. But it is not that which we mean now: a man may choose a low district or a high one; but, wherever he go, let him ascertain the natural slope of the surface, and take care that the basement of the house he treats for is not too near the level of the nearest sewer.

Such a precaution is particularly necessary in the case of any street whose name suggests the idea of *water*—such as any street with any combination of Bourne, Burn, Brook, Bridge, Conduit, Mill, Pond, Spring, or Well. In any such

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street there once was some natural stream, carrying away the rainwater of the district. The ground abutting on such a stream is soft, muddy, and alluvial, and mixed with much vegetable and animal *débris*. Of course it is damper than the higher ground near, and is not the best place for a house. The stream itself now deepened and covered in, is converted into a tube, which serves as a main sewer. Find the lowest level in any such street, or series of streets, or go out in the evening and observe the long line of gas-lights, and wherever they appear to sink to the lowest level, there, if a sewer run across the street, is the place for it. Be it remembered, too, that many streets have a fictitious elevation given to their lowest part by a kind of bridge, even as it is proposed to throw a bridge from Holborn to Snow-hill, across the valley of the Fleet. In low districts, too, the whole line of street is an artificial embankment. Hence it is well to examine the level of the mews and back settlements close by, for they are more likely to show the true dip of the surface than the main streets do; or a visit to the Office of the Metropolitan Board of Works, Greek-street, is worth paying, to see the line of known sewers. We say of *known* sewers, because, as we learn, there are in all parts old subterraneous channels the existence of which is unsuspected till discovered by accident. Many large sewers cross streets, and run under the houses.

Now, the first advice we give is, not to take any house close to the line of a large sewer, unless the number of favourable circumstances be such as completely to out-balance this disadvantage; and disadvantage we hold it to be, because we believe, as an empirical fact, that more deaths and illness occur along the line of the great sewers than elsewhere; because these sewers contain a large and fluctuating quantity of offensive gas panting to escape, normally, by ventilating shafts and openings; abnormally, by fissures and crevices; because the house-drains may lead directly into the large sewer, and any defect in them would give easy entrance to sewer gases and rats; because, even if the drains are perfect, unsuspected rain-water pipes may bring up the vapour to the very outside of the room where the children sleep; and still more, because of the occasional liability to sewer-floods. Happily these are much rarer than they used to be; but let us suppose a thunderstorm, and a great mass of water falling suddenly on high ground. As the land is covered with buildings, and streets, and pavements, so is water hindered from soaking into the earth. Every contrivance is resorted to to make it run off the surface, and so to create that dryness which renders a town residence so warm and salubrious in the winter. Then, suppose any portion of the sewer-tube insufficient to discharge the water, or temporarily obstructed for purposes of repair: either it may burst, as a sewer did in the Green Park some years ago, or, as is more common, the waters must rise by a reflux through the drains of the houses close above the point of delay.

Such floods were once habitual in many parts of London along the line of great sewers, and still are in some parts, which we will not incur the risk of naming. Early in life we were lodging in a house in which the thing happened, and can bear witness to the most dreary wretchedness of a house in which a stinking flood suddenly rises, puts out the kitchen fire, drives all the contents of sewers, etc, backwards into the house, and when it subsides leaves a film of stinking mud which fills every accessible crevice. That such casualties are not unknown even to this day, we believe can be testified by the inhabitants of more than one suburb; nay, in the Reports before us, we signal out instances of such floods in 1859, in most fashionable localities. In one case 29 houses—11 poor, and 18 rich—were, as we read, "suddenly invaded by a flood of black, stinking water. It came roaring up through every sink, and every water-closet in the basement, and blew up many of the drains. At No. —, —— Street, a large hole was burst up in the kitchen passage, and the water rose in an incredibly short space of time, to the height of 5 feet 3 inches; so that it is quite certain, that had the flood happened in the night, the numerous domestics who slept in the basement of this and the adjoining houses, could not have escaped drowning: as it was, they had to rush for their lives." This was the consequence of a thunder-storm at twelve at noon, occurring when there *happened to be* an obstruction, created by workmen, in the main sewer which ran across the street.

In *another* district, on the same day, *another* sewer happened to be obstructed, and the house of a nobleman, and that of a tradesman who lived near, were invaded by a sewer flood, which left six inches of stinking mud. In these cases the Metropolitan Board of Works cleansed and disinfected all the houses, and paid heavy compensations for the damages inflicted. A Medical gentleman who lived in one of the houses, complained that his family were in a *low* state of health for some weeks.

These are extreme cases. But they illustrate the fact that even in a district 50 or 100 feet above the river, the elevation avails you not, unless your kitchen-floor be of an adequate height above the nearest main sewer; and that, *à fortiori*, if a man go and live in a district where the sewers enter a tidal river under high-water mark, he must be well provided with flaps and valves to keep the rising water from bringing back under his kitchen-table all that ought to have flowed out by the sewers. Sewer floods from a high tide are, as we are credibly informed, looked upon as part of the "eternal fitness of things," in some of the under-water-mark districts south of the Thames. But they are not unknown in some low-lying newly-built districts north of the river. We have seen reports of twelve or thirteen houses in one street, and one or two in another street, which were flooded on the occasion of a high tide when the flap at the mouth of the sewer in the Thames, which ought to have hindered the reflux, *happened* to be deranged, and certain galvanised iron valves which ought to have protected the orifices of the house drains, happened at the same time to be in a fortuitous state of dislocation. It is pleasant to think of a boarded kitchen-floor, of the skirting-boards round the base of the walls, of the cupboards and recesses of all kinds, covered with a few inches of fæcal filth. The main drainage of London will, however, soon, at the cost of the ratepayers, render these river-side swamps more salubrious, to the great benefit of the poor nobleman and builder whose property will be improved.

Some houses, too, get a fictitious elevation of the basement story by an excavation of the earth below. The obsequious house-agent begs to be permitted to show your wife the "noble kitchen," lofty and spacious. Before you take that house, inquire the difference of level between it and the adjoining street sewer; inquire into the possibility of obstruction in the latter, particularly if the fall be rapid; for one sewer flood renders a house untenantable for weeks.

It is very desirable, too, that no part of the house stand against excavated earth; yet nothing is more common in some districts. It may be a butler's pantry, or a scullery, carried out into a yard. If a wine-merchant or publican choose to sink a cellar in that way, and find it a well, that is his concern; but soakage from earth containing house or stable drains *does* render a place not very wholesome for servants to sleep in. Moreover, if your neighbour's drain bursts into, and taints, your house, you have no remedy.

So far, then, of houses, as regards the level of the ground they stand on; more especially in reference to the level of adjoining watercourses. Some day we may proceed further with these hints to assist our readers, and their patients through them, in the search for a House.

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THE WEEK.

Death has been very busy of late in thinning the ranks of our Profession; old and young have alike bowed before him. We have scarcely inserted the notice of the life and labours of one Medical veteran, when another, even senior, and an old professional rival, follows him to the tomb. Sir William Burnett departs from among us, and, within a few weeks, his old opponent, Sir William Pym, follows him, after reaching his ninetieth year. The former in the Navy, and the latter in the Army, long before we and many of our readers were born, were serving in the Mediterranean, and battling fiercely over the vexed question as to the contagion of plague and yellow fever. Pym was a staunch contagionist, Burnett as staunch on the other side: both rose to high station, and Pym retained his post of Superintendent of Quarantine to the last. These veterans of the Army and Navy have departed, in company with others from the civil ranks of the Profession. Dr. Roots, who was elected Physician to St. Thomas's Hospital more than thirty years ago, and was a most esteemed Clinical teacher there for many years, has died "in harness" at his London house, in his 76th year. Some ten years older than Roots, the venerable Charles Earle, of Cromer, an old and favourite pupil of Cline and Astley Cooper, the warm friend of Rigby, Martineau, Crosse, and other Norwich worthies, has departed full of provincial honours. Somewhat younger, but in his 68th year, Mr. Wakefield, the well-known Surgeon to the Middlesex County Prisons, a man greatly beloved and esteemed, has left vacant an office for which the Middlesex Magistrates are being besieged by numerous competitors. Among the younger men are Bradshaw, of whom mention is made in another paragraph; and Egan, a young Irishman of no common ability, who worked himself to death at the age of 27. We may close this brief notice by an allusion to the death of the mother of our Queen. After suffering for many years from cancer, and narrowly escaping the tortures of the American Fell, the Duchess of Kent passed away peacefully in her 75th year.

The distinguished French Physician, the late M. Aran, whose premature death we have announced, was in some sense a loss to ourselves as well as to his countrymen, inasmuch as from an early period of his career he had occupied himself in the various periodicals with which he was connected in diffusing in France the much-wanted knowledge of what has been done in England. An ardent student, and gifted with rare ability as well as indefatigable perseverance, he entered with all his soul into the struggles of the *concours*, and carried off the prizes of Hospital-Physician and Deputy-Professor at the Faculty. In this latter capacity he attracted a large private class in Therapeutics; and eventually he would certainly have obtained a Chair in the Faculty. Lecturing last year for M. Rostan at the Hôtel-Dieu, he met with the fullest success, crowding the large ampitheatre with an attentive auditory. Physician to St. Antoine, M. Aran walked to that distant Hospital every morning at six o'clock, paying a long visit, seeing into everything himself, determining the diagnosis, noting the action of remedies, dictating the history of the cases, and patiently instructing his pupils in the difficult art of observing,—terminating the whole with Clinical Lectures, which were as eagerly attended by foreign Physicians and young Practitioners as by his pupils. Only the titles of a few of his numerous works can be mentioned here. Scarcely had he completed his *internat* when he published his Manual on Diseases of the Heart. In 1858 he translated Skoda on Auscultation; and in 1859 Bennett on Inflammation of the Uterus; while his own Treatise on Diseases of the Uterus, although only published a year ago, is already out of print. Of late years he had especially devoted himself to the study of the Materia Medica, and has enriched the pages of the *Bulletin de Thérapeutique* with numerous Memoirs on Therapeutics; and, among other subjects, the treatment of rheumatism—to an apparently mild attack of which disease (through the complication of cerebral symptoms) he succumbed. He has left several works unfinished, and among others a Dictionary of Therapeutics. Full of confidence in the power of Medicinal agents, he was bold and ingenious in their employment, preferring even a doubtful remedy to remaining disarmed and powerless in the face of disease. His brain, in fact, was too actively employed, and a predisposition was thus excited which was brought into play during the occurrence of the rheumatic affection which his own imprudence had brought on. In his will he forbad all ceremonies over his grave, ordering his remains to be unostentatiously removed to Bordeaux, his native city.

A very extraordinary case has been investigated by the Coroner at Northampton. A single man, aged 35, a moulder at Wolverton, was brought to the Northampton Infirmary on the evening of February 27. He was palsied in the legs, and complained of great pain in the belly. He gave no intelligible account as to how he got into that state. He soon died, and on a post-mortem examination the spine was found broken (the exact nature and situation of the fracture is not noted), blood effused on the spinal cord, and the intestines matted with lymph. It was shown, at the adjourned inquest, that the deceased had met with a heavy fall on the back on the afternoon of February 26; but that he walked home, paid his rent, walked about all the evening, visited several public houses, got very drunk, went home late and could not get in, and then went into the yard, lay down to sleep there, and awoke in the morning sober, but unable to move his legs. The point of interest in the case is, that fracture of a vertebra may exist and yet not hinder the patient from walking freely about till effusion of blood takes place. At the first inquest, Mr. Gray, the House Surgeon, is reported to have said, "My belief is, that as soon as the back was broken the man would have become incapable of motion." This opinion, though corrected afterwards, is that which would have been given by most Surgeons.

The "Monthly Return of Births, Deaths, and Marriages registered in the Eight Principal Towns of Scotland, with the Causes of Death at Four Periods of Life," and the "Weekly Return of the Health and Meteorology of Manchester, communicated to the Manchester and Salford Sanitary Association," are gratifying evidences of the increasing value ascribed to statistics. We observe that out of 17,998 cases of sickness occurring during the four winter months at Manchester and Salford, 7107 were cases of disease usually ascribed to cold, such as rheumatism, bronchitis, pneumonia, and pleurisy. The cases are collected from the pauper, charitable, and public institutions, according to the manner which was attempted in London two years ago.

So great has been the curiosity excited by the accounts of M. de Chaillu's adventures in the Gorilla country of Central Africa, that the Managers of the Royal Institution invited that gentleman to deliver a lecture on Monday evening, when the theatre was densely crowded. Among the auditory were many persons, especially of the gentler sex, burning with anxiety to hear some of the shocking details of cannibalism, or of some semi-human habits and structures of the ape that should raise mystical questions as to the origin of man. Concerning cannibals, we learned that human flesh was considered a luxury, and that not only captives, but the

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bodies of those who die of disease, are eaten. But, out of decency, cannibals don't eat their own relatives; they give them to other tribes, and receive their dead relatives in exchange. The Gorilla appears to be a most formidable brute, with a roar like a lion, and beating his huge chest like a drum as he advances on his foe. He often flattened a gun-barrel by using it as a club, and smashed a man's ribs with a blow of his fist. The male has a tremendous mesofrontal ridge, dividing the temporal fossæ, which cover all the front of the cranium. The jaws and tusks are of prodigious force. The female has no frontal crest, and is more timid. The skull of the infant Gorilla differs little from that of the Chimpansee. The Gorilla is not gregarious; neither eats negroes nor flesh at all; is a strict vegetarian; lives a solitary life with its mate and young ones; builds no nest; lives on the ground, in the darkest part of the forest; the female sleeps in a tree, the male squats on the ground, with his back against the trunk; often stops to sit down, because the legs are weak for the weight of the trunk; young ones when caught were most untameable, and would neither eat bread nor anything else that was cooked. The cubs or infants are born black; those of the Chimpanzee white.

Mrs. Doctor Elizabeth Blackwell, in a letter to the *American Medical Times* (No. IX.), describes the successful efforts of herself and sister during nine years in founding the New York Infirmary for Women and Children, in which poor women and children are treated by these ladies,—the main object being, however, to provide ladies who are engaged in the study of Medicine opportunities for seeing and assisting in practice, presenting such guarantees to the Profession of intelligence and earnestness on the part of its students that they may in time gain admittance to other public Medical Charities. The Infirmary has a Board of Consulting Physicians. With regard to the question in Medical Ethics, whether women should be allowed and encouraged to practise Medicine, Mrs. Blackwell says:—"It may be interesting to the Profession here to know that it was settled in England two years ago, when the General Council of Medical Education and Registration of the United Kingdom received the testimonials of a Lady-Physician (herself), and enrolled her name in the Medical Register for 1859."

We have more than once of late felt it our duty to notice the importance of the most rigorous care in ascertaining the facts in every Medico-legal inquiry, and in well weighing the inferences. Care should be taken, for example, not merely that the inference drawn is a possible one, that it is the most probable of all those that can be drawn, but that there is nothing in the facts that renders it improbable. Suppose a girl of eight to be brought to a Surgeon suffering from inflammation of the pudenda with discharge. A suspicion that she has been abused may cross the Surgeon's mind; but he has no right to hint at such a thing before he has considered all the facts, and before he has deliberately judged whether it be more likely that the child is suffering from a common mucous inflammation than from the effects of an indecent assault. Yet, if we may credit the statements made in a pamphlet entitled "The Trial of Joseph Hodge, by Jonathan Wybrants, M.D.," it would appear that a poor man has been sentenced to twenty years' penal servitude on a charge of having carnally abused a girl, aged eight, solely on such Medical evidence as this. On the 31st July it was noticed that her shift was stained. The neighbours "said they thought it was the bad disorder." The same day she was taken to a Surgeon, who (if the pamphlet may be relied on) asked the child if any one had been taking liberties with her. She said "No." He did not examine her person. When the child was taken home, she was questioned and cross-questioned by her aunt, who told her that some one must have taken liberties with her; and "if you don't tell me, you will surely die." Then the child accused Joseph Hodge of having abused her. She was taken back to the Surgeon on the following day, who then pronounced her to be labouring under gonorrhœa, and that she had been abused by a man. Evidence was brought that Hodge was not suffering under gonorrhœa, and that the girl was not suffering from any effects of physical violence; yet, strange to say, on this evidence, supposing Dr. Wybrants' pamphlet be reliable, the man was sentenced to twenty years' penal servitude. The child made no complaint for a week after the alleged offence. There were no evidences of violence. The Surgeon's question to the child might have suggested to her the accusation. We say again, that there may have been evidence which does not appear in Dr. Wybrants' pamphlet; but that if mucous purulent discharge is to be considered proof of carnal abuse, no man who is ever alone with a girl can be considered free from peril of twenty years' penal servitude.

M. Jules Guérin makes the following remarks in the *Gazette Médicale* upon the recent election into the *Académie de Médecine* of M. Claude Bernard:—

"Every one is aware of M. Bernard's claims to admission, and which, indeed, some years ago, opened the doors of the Institute to him. In enrolling him among her members the Academy has done more than summons one whose name has already become celebrated. It satisfies a principle. M. Bernard, in fact, is no ordinary worker, and he is now the principal representative of Experimental Physiology. The pupil and successor of Magendie, to the merits of his master, who was but a skilful experimenter, he has added that of new and enlarged conceptions. His is a mind which reasons as well as acts. Not only does he manœuvre the experimental scalpel with all Magendie's dexterity, but he employs chemical analysis with the same success—being both a consummate anatomist and an accomplished chemist. For these reasons his entrance into the Academy has the significance of an idea, of a principle, which doubtless explains the unanimity of the reception which he experienced. If M. Bernard apprehends this he will not be wanting in his mission, but will regard his position seriously, and enable the Academy to profit by the eminently scientific character which he has conferred upon his productions."

The *Daily Telegraph*, in an unusually vigorous article, pleads for the elevation of Sir Benjamin Brodie to the peerage, as the first instalment of the due recognition by the State of the importance of Science.

"Whatever faults they may have, the professors of the science of Medicine deserve unquestionably to be reckoned among the most diligent investigators of Nature. Working hard is their characteristic. Derangements of the human system—subtle, delusive, and recondite—only stimulate in them the ardour of investigation. With indefatigable zeal they record their experience for the benefit of posterity, and, passing their time habitually among the phenomena of pain and suffering, disease and death, they acquire humane views of their fellow creatures, whom it is at once their business and their pleasure to aid. A great Professor of Medicine or Surgery, therefore, is obviously one of the most useful members of the community."

The philosophic and successful cultivator of Medicine is not one degree inferior in breadth of intellect or real dignity to any of the statesmen, lawyers, generals, or successful traders whom it is the fashion to ennoble.

"To associate Sir Benjamin Brodie with the Peers of England, therefore, would be only to recognise in his person the rare union of science and art which must exist in Medical men of the first class. The chief advantages would accrue to the public, since the members of the Faculty, observing to

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what eminence a career of humanity, uprightness, and usefulness might lead, would apply themselves with tenfold diligence to their studies."

A fortnight ago we noticed with regret the existence of scarlet fever among the scholars at Harrow School, and we cautioned the Head Master against the risk he incurred in compelling the boys to remain at school liable to the risk of the disease extending amongst them. Our advice has not been offered in vain; for we are informed that the School has been disbanded. It will be now necessary that precautions, such as thorough cleansing and ventilation, should be adopted before the return of the pupils. We have no doubt that the experience thus painfully gained by the Head Master will not be lost should a like emergency again arise.

We stated long ago that Dr. Ozanne, a Homœopath, had been appointed Staff-Surgeon of the Guernsey Militia. It is alleged that, "without having done any public duty, he was summarily elevated over the heads of all the Regimental Medical Officers, and placed on a staff previously composed exclusively of Surgeons promoted thereto in consequence of seniority and great length of service." The appointment is contrary to common sense. The whole of the official correspondence ought to be published, and General Slade's conduct should be brought before Parliament.

One of the Medical Heroes of the Crimea and of Lucknow, one of the earliest decorated by the Victoria Cross, has recently died in Ireland. Assistant-Surgeon William Bradshaw was buried last week at Thurles, and we are sure that many of his brother officers will be glad to know that at his funeral distinguished marks of respect were paid to the remains of one who shared their hardships, their battles and campaigns, and ministered to their comforts. A Correspondent informs us that although the funeral was at an early hour, with the intention that it should be private, very large numbers of town and country people of all classes assembled to pay their last respects to one whom, as a soldier, and a man, they admired, esteemed, and loved. On his coffin were displayed his three medals and Victoria Cross, well and bravely earned by him during the short service of six years. Our Correspondent adds:—

"As the mournful procession proceeded through Thurles nearly all the houses of business were closed, and we could mark the traces of sincere regret on the faces of many who formed the sad procession; and of the hundreds who attended, each seemed to vie with the other for the mournful gratification of bearing the youthful hero to his early grave, where he now reposes, leaving to his country his name, and to his friends the hope of a joyful resurrection."

HER MAJESTY'S LEVEE.—The following gentlemen were presented at the last Levée:—Dr. William Aitken, by Lord Herbert; Deputy-Inspector-General T. D. Hume, M.D., by the Director-General, Army Medical Department; Surgeon W. Cruice, on appointment to the Royal Marines, by Major-General Wesley; Assistant-Surgeon J. Edward O'Loughlin, by the Director-General, Army Medical Department. Dr. Parkes, on appointment to the Army Medical School, by Lord Herbert; Deputy-Inspector-General Gideon Dolmage, by the Director-General of the Army Medical Department; Staff-Surgeon T. G. Fitzgerald, by the Director-General of the Army Medical Department; Mr. J. H. Carruthers, Surgeon R.N., by the Duke of Somerset; Dr. Cape, by Lord Alfred Paget; Assistant-Surgeon Yates, by Lord Leigh. The following gentlemen attended:—Deputy Inspectors General.—Balfour, Longmore (Professor of Military Surgery at the Army Medical School); Surgeon Major Monro, M.D., (Coldstream Guards.) Doctors.—Maddock, Thomas Watson, and James B. Gibson, C.B.

REVIEWS.

The Medical Missionary in China: a Narrative of Twenty Years' Experience. By WILLIAM LOCKHART, F.R.C.S., F.R.G.S., of the London Missionary Society. Pp. 404. London; 1861.

THIS is not a well written or scholarly work; it is confused in its arrangement, and altogether wanting in force; moreover, it is filled out with a good deal of padding, consisting of extracts from missionary reports and lectures, the piety of which does not atone for their tediousness. Nevertheless, the writer appears to be an honest observer, and to have discharged his duties in accordance with the spirit in which he was sent out, and he presents us with abundance of interesting matter with respect to Chinese affairs generally, and Medical Missions in particular.

He presents us with no detailed history, but with a series of more or less disconnected observations. After some remarks on the late war, in which we are surprised to find—as we do throughout the book—how highly this minister of a religion of peace approves of the agency of gunpowder, he gives a really useful and practical account of the system of literary examination which prevails in China, and his account is well worth studying, now that we ourselves are threatened with so large an extension of the pedantic "competitive examination" system.

There are, in China, very few uneducated persons, and literary excellence is the instrument by which the door of office is open to all classes of the population alike. To the system of education Mr. Lockhart ascribes whatever is excellent and permanent in the institutions of China, and he admits that in no country on earth is the duty of filial obedience more sacredly observed. Nevertheless, it is, at best, but a system of book-work and cram. One examination follows after another, and the strain upon the mental faculties is such as seriously to affect not only the examinees, but the examiners as well. Two of the latter class of gentlemen came to place themselves under Mr. Lockhart's care. Both had been seized with paralysis while engaged in the examinations, and said that the work was so laborious that they had no rest for several days and nights. They were utterly prostrated. "Many of the candidates fail during the trial from the labour of composition, and numbers of them have at various times been seen completely broken down in health and rendered useless for life from cerebral disease caused by their exertions to complete their essays." "The success of the essays depends not so much on the genius of the writer, or his power of original composition, as on the strength of memory displayed by him, in the use of classic allusions, and his skill in adapting them to the illustration of his composition. Perhaps no faculty of the mind wearies the body more or is more exhaustive than that of memory, the strain on which, at these examinations, is excessive."

The account which Mr. Lockhart gives of the Benevolent Institutions of the Chinese, including Foundling Hospitals, Humane Societies, and Dispensaries, is very interesting; so is his account of their tea-drinking habits, and of their social customs, and tendency to suicide, and of the opium traffic, and the effect of opium smoking, in which last points the good sense and moderation of the author stand out in favourable contrast to the absurd and exaggerated statements of others.

The chief causes whence opium smoking arise, are two: First, *disease*, such as ague and rheumatism, for which the pipe is prescribed by the native practitioners; and, secondly, *idleness*, or, rather, the want of sufficient occupation for leisure hours, for the Chinese have no periodical literature to amuse themselves with, and home is not always attractive to them. The Medical Missionaries seem to have been successful in breaking off the habit, and effecting a cure in such of the smokers as submitted to their prescriptions. The pipe was absolutely discontinued, its place supplied by camphor and opium in pills; pomegranate and other astringents given to check the diarrhœa, which always follows the abandonment of the pipe; and the cure followed by tonics, aromatic stimulants, and generous diet. "Great numbers," out of "several thousand" opium smokers, we are happy to find, were cured by this judicious treatment.

As for the main bulk of the work, in so far as it treats of

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the Medical Missions, their history and success, it is so confused a patchwork of odd scraps of reports, put together with neither elaboration nor arrangement, that we are scarcely able to give our readers an account of what makes us giddy to look at. The writer strongly advocates Medical missions as a means of introducing Christianity to the notice of the people. But he requires that the Medical Missionary should be an educated Physician or Surgeon, and not a mere "minister." "I believe," he says," "it is a great mistake to suppose that an efficient Medical Missionary can be made out of a minister by giving him a few months' attendance on lectures and Hospital practice, but because he is going to practise only among the heathen, allowing him with but a slight examination to obtain a diploma, and to think himself henceforth a qualified Surgeon, capable of assuming any responsibility."

Mr. Lockhart has seen "very serious consequences" follow from this "more than questionable proceeding," and as he writes on it with unusual warmth, we do not doubt that he writes from the life. We cannot help suggesting, however, that difficult as it may be to make a "minister" into a Surgeon, there is evidently no lack of Surgeons, who are (in their own eyes at least) fully qualified for the function of "ministers;" and when the writer introduces four pages of a sermon by Professor James Miller, he seems scarcely aware of the homely proverb about "sauce for the goose."

We learn that from an early date, European residents in China have been profuse in their endeavours to give the Chinese the benefit of good Medical advice; but the Americans sent out the first Medical Missionary, the Rev. Dr. Peter Parker in 1835. In 1839 our author was sent out by the London Missionary Society, and spent twenty years in Hospital work at Macao, Finghai, Chusan, Hong Kong, and Shanghai. Drs. Hobson, Diver, Hirschberg, and Welton have been other labourers in the field. One young Chinese, Dr. Wangfun, was sent to Edinburgh, and received a Medical education there. Native assistants have been taught to perform operations. Many most useful volumes on Natural Philosophy and Medicine have been translated into Chinese. Thus, much suffering has been relieved, the seeds of improvement have been sown, and a large mass of miscellaneous information as to the diseases of the Chinese and their etiology has been collected, which it would be agreeable to see in a useful and readable form. The native population, also, who flock to the Hospitals and Dispensaries, may in due time be rendered grateful, and may appreciate the excellence of that Divine faith which has inspired its missionaries to labour so hard among the unthankful and the evil—for unthankful it seems that the lower orders are. "While," says Mr. Lockhart, "some impressions favourable to religion are produced, and some prejudices removed, the good in most instances stops there, and we still look for that softening and subduing influence upon their feelings and character, which a long course of kind treatment might be expected to produce."

The Principles of Forensic Medicine. By WILLIAM A. GUY, M.B. Cantab., Fellow of the Royal College of Physicians, etc. Second Edition, with Numerous Illustrations on Wood. Pp. 534. London: 1861.

IN this second edition of Dr. Guy's very able Handbook of Forensic Medicine, we find seventy-five original wood engravings, illustrating some of the most important subjects treated of; especially the microscopic appearances of the crystals of various poisons, and likewise of many of the poisonous seeds and roots which it might be difficult to identify in any other manner. The toxicological department of the work appears to be much improved and enlarged, and bears the marks of careful personal investigation. The section on arsenic is particularly good. There is a full description of every available process for its detection, and every thing described is written "from the eye," as some one says of Homer. The following passage is interesting in itself, and may be an example of the personal research which has been employed to render every statement accurate:—

"As it is very important that these and similar statements respecting the detection of minute quantities of arsenic or of other poisons should not be discredited, a short digression as to divisibility of matter may be permitted. Some misapprehension certainly exists on this subject, in consequence of the bulk of matter represented by a grain being undervalued. The best way to correct this misconception appeared to be the counting out the number of distinct particles of common objects visible to the *naked* eye. I have caused this to be done in the case of certain small seeds, and have found that the seeds of digitalis number 1126 to the grain, and those of *lobelia inflata*, 3176; while the fern seeds of the shops can be counted to the number of 50,900 to the grain. When, therefore we speak of the ready identification of the 1000th of a grain of arsenic, and the possible recognition of the 5000th of a grain, we are still speaking of visible particles. When again we speak of metallic crusts, obtained by Marsh's apparatus, for the half-millionth or millionth of a grain of arsenic, or of a thousand fragments of copper, thickly coated by a grain of arsenic, according to Reinsch's method, it is only necessary to revert to the fact that a single grain of gold can be mechanically divided into 490,000 visible pieces, and into the almost incredible number of 4,900,000,000 fragments visible by the microscope."

Every part of the work is elaborated in what we venture to call *finished* style. Some parts there are that would have been better if fuller in detail; there is, for example, one point in which we happen to be in personal need of information—viz. the phenomena presented by children *found dead* in bed with their parents—a thing so disgracefully common in London as to suggest the idea that it is a popular method of infanticide, and one practised with entire impunity. But beyond the bare mention, Dr. Guy gives no help. The whole book, too, would have been better in a larger form, with a larger page and type. What is the charm of these eye-consuming manuals? No one ever need carry about books, after the pupillary stage. The Americans, a practical people, reprint our works in a decent size, and we wish the original authors and publishers would have the courage to do the same.

On Insufficiency of the Aortic Valves in Connexion with Sudden Death; with Notes Historical and Critical. By JOHN COCKLE, M.D., F.L.S., etc. Pp. 30. London: 1861.

"THE ventricles of the heart," says Dr. Cockle, "in common with every other organ in the body, require some respite, however short, from active labour. Such respite is afforded by the semilunar valves, which, by a mechanism purely physical, resist the downward pressure of the columns of blood, completed by the last contraction of the ventricle. Thus is the heart, as it were, momentarily relieved of the principal portion of its burden." This passage will serve to show the scope of this able pamphlet of Dr. Cockle, in which he describes the symptoms and consequences of insufficient closure of the aortic valves.

A Practical Treatise on the Ætiology, Pathology, and Treatment of the Congenital Malformations of the Rectum and Anus. By WILLIAM BODENHAMER, M.D. Illustrated by 16 Plates, and Exemplified by 287 Cases. Pp. 368. New York: 1860.

THIS is a perfect work of its kind. It brings into one volume all the scattered cases and observations extant upon a very interesting department of Surgery, with the most copious bibliographical notices, and an account of the best methods of treatment by artificial means. The author is quite cosmopolitan in his researches. Anyone reading French authors, he says, must be impressed with the idea that out of France nothing is known. The Germans ignore the French and English, and French, English, and Germans agree in neglecting the Americans,—whether from ignorance, pride, or prejudice, our author does not determine. He enumerates no fewer than nine species of malformation, according to the seat of obstruction, and the existence of complications with the genital or urinary organs. These are well illustrated by lithographic plates. Altogether, it is not so much a mere book, as a library, which Dr. Bodenhamer has given us, and it will be welcomed by everyone who desires to know all that is known on these malformations. We see that the work is dedicated to his son, now a student at Paris; this touch of nature gives us a favourable impression of the author's personal character, and shows that the father has his heart in the right place.

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PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

CASE OF CYSTICERCUS CELLULOSÆ IN THE ANTERIOR CHAMBER OF THE EYE.

By Dr. MENDE.

THE wife of a shoemaker, 25 years of age, of healthy appearance, and far gone with her first child, applied to the author on account of an obscurity of vision. On inspection a cysticercus was perceived with the utmost distinctness in the anterior chamber of the right eye. The worm was of a delicate white, the bladder being so transparent that the brownish iris could be seen through it. It was of the size and shape of a small pea, and below was a process which was somewhat whiter and less transparent than the rest of the worm; and from this projected a white untransparent neck, about a quarter of a line in length, having at its extremity a small round head, which, examined by a lens, exhibited lateral swellings, and resembled the head of a tænia. The bladder of the worm covered the lower part of the pupil, leaving this free for two-thirds of its circumference, while in appearance it did not differ from that of the other eye. The worm was motionless, and movements were not induced when the patient moved her head, or when a strong light was directed upon the eye. At different examinations during the next three days the worm was found to have assumed different positions and various shapes. It was very interesting to observe through a lens how it thrust its head here and there, just as a leech, before it fixed on a spot to commence sucking from. When it attached itself to the anterior of the iris its neck was bent backwards, and the bladder almost completely obstructed the pupil—a slight quivering movement, like that seen in the sucking leech, being imparted to the tube-like process of the animal while the bladder continued motionless. Sometimes the process was distended into a bladder much smaller than the other, below which it was placed, and from which it was separated as if by a ligature. The woman was confined on the third day after being seen, and continued under observation for about three weeks before an operation was performed, the animal frequently changing its position, attaching itself to the various surrounding parts, without seeming to inflict any injury on them by its sucking process. The pupil at last became narrower than the opposite one, while its form was converted into an oval, and vision got more and more impaired. Fearing the production of iritis, a linear incision was made, and the worm, discharged with the aqueous humour, was carefully captured. It was placed in tepid water, but exhibited no movement. The wound in the cornea soon healed under the employment of ice, and the eye has regained its perfect powers. The worm three months after its extraction has contracted from eight to five millimètres in length.

So far as the author is aware, there have been seven instances of cysticerci in the anterior chamber recorded. The first was discovered by Schott, of Frankfort, and Gräfe, Hirschler, and Appia have each described a case, and Mackenzie relates three cases. This last writer and Gräfe have also collected cases in which the cysticercus has been found in various other parts of the eye.—*Gräfe's Archiv für Ophthalmologie*, Vol. vii. p. 122.

EXCERPTA MINORA.

Application of Nitrate of Silver to the Larynx and Trachea.—Dr. Fetter says that for a number of years he has been in the habit of applying nitrate of silver, triturated with a little white sugar, by means of a small glass tube, three or four inches in length. "The powder is placed in the tube, and the forefinger is placed on one end, while the other is passed into the mouth as far as possible without coming in contact with the epiglottis. The mouth is next closed tightly around the tube and the finger being removed, a strong inhalation or inspiration at the same moment will draw the powder into the larynx and trachea, which is absorbed by the mucous membrane, without any unpleasant sensations. After the first application, the patient can repeat the same without assistance."—*American Medical Times*, No. 5.

Supernumerary Fingers and Toes.—Dr. Rörberg reported to the Swedish Medical Society upon a case of monstrosity. The child which was born at its full time, exhibited seven fingers on the left hand, two of which were attached to the metacarpal bones of the little finger, and two to those of the ring finger. On the right hand were six fingers, two being placed on the metacarpal bones. The superfluous fingers were as well proportioned as the others. On the left foot were six toes, two being attached to the metatarsal bone of the little toe. The penis was wanting, an opening existing at the pubes four-and-a-half lines in diameter, within which could be distinguished the glans, orifice of the urethra and prepuce. Urine passed without difficulty. The scrotum was well formed and contained the testes. The mother had borne eleven children, two of which number had exhibited six fingers on each hand. A brother of the father had had likewise two children with six fingers on each hand.—*Journal für Kinderkrankheiten*, Bd. xxxv., p. 426.

Topical Application in Ague.—M. Sezeric, a French provincial Practitioner, states that he has derived great advantage from the following application, which he has employed in a great number of cases of the various types of ague:—Essence of turpentine, 125 parts; Sydenham's laudanum (vinum opii), 6 parts; camphor, 3 parts; and olive oil, 60 parts. When the apyretic period commences, the spinal column, from the cervical region to the coccyx is to be rubbed with this liniment, the frictions being continued every six hours, until a new paroxysm occurs, about ten minutes being occupied in each rubbing. The very next paroxysm is usually much less severe, and after the third or fourth the fever ceases, after when, however, some frictions may be still continued as a matter of precaution.—*Moniteur des Sciences Méd.* No. 23.

Coal-tar Emulsion.—M. Demeaux, in a note to the Academy, recommends the following preparation of coal-tar—a substance much used now in the French Hospitals as a disinfectant. This preparation, he says, is recommended by the facility with which it is made, the quantity of coal-tar it contains, and its great solubility:—Of coal-tar, soap, and alcohol equal parts are to be heated in a bath until complete solution is effected, and, on cooling, a very soluble soap is produced, which, with water, makes a stable emulsion. It costs about a franc the kilogramme, and three kilogrammes will emulsify 100 litres of water, each litre containing ten grammes of coal-tar; and in this form may be very advantageously used in Hospitals and dissecting-rooms, in certain manufactures, and other places where insalubrious inhalations prevail. The coal-tar soap thus combined is a very manageable substance, and may be used in any desired degree of concentration, and either in the solid or fluid form—its great solubility in cold or warm water preventing its soiling any substance it comes in contact with. It may be usefully employed in baths in some diseases of the skin; while, as a dressing, it is of good service in cases in which the exeretions give rise to fetid emanations.—*Bull. de Thérap.*, vol. lx. p. 130.

Treatment of Gonorrhœa by Distilled Water of Copaiba.—Dr. Langlebert states that he finds that, by dissolving the mineral substances employed as injections for gonorrhœa in water which has been distilled over balsam of copaiba, much more beneficial effects are produced than when simple water is used as the solvent. The water distilled over the balsam and collected in a recipient is colourless, but it exhales a strong odour of copaiba. Given internally it exerts less effect upon the gonorrhœa than the balsam itself; but Dr. Langlebert has found it especially useful so given in cases of blenorrhagia of the deep-seated portions of the urethra, accompanied by catarrh of the bladder. It is much more readily taken, and more easily borne than the balsam.—*Moniteur des Sciences Méd.* No. 24.

Copper Injections in Hydrocele.—M. Pereira, of Oporto, has employed injections of sulphate of copper (2 to 8 parts to 190 and 250 parts of water) in the treatment of hydrocele; and of 25 cases so treated, he has cured 21 radically, without any accident, in from 10 to 20 days. In 2 cases the injection had to be repeated, and in 2 inflammation and suppuration of the tunica vaginalis ensued.—*L'Union Méd.* No. 26.

OVARIOTOMY IN CALIFORNIA.—Dr. Cooper, of San Francisco, reports a case of ovariotomy. The patient died in six hours, from hæmorrhage. The same thing has happened to the same Surgeon before.

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FOREIGN CORRESPONDENCE.

GERMANY.

Kreuznach, March 9.

An unusually wet summer and the after-pains of a sanguinary war are circumstances which do not tend to increase the number of visitors in a watering-place; and, therefore, with only few exceptions, almost all German health-resorts were less frequented in 1860 than they had been for several years previously. One of these exceptions was Kreuznach, where the last season was just as brilliant as has ever been the case before. This is partly due to the great and continually-increasing reputation of its springs as remedies against the host of scrofulous diseases, female complaints, diseases of the skin, syphilis, etc., and partly to the circumstance that the railway communication between this place and Cologne and Paris has now at last been completed. The Russians formed, as usual, the largest proportion of visitors here, but there was also no lack of Germans, English, and Frenchmen. Altogether, there were 5342 visitors from the 15th of March, on which day the season commences, till the end of September. The most numerous cases were such of diseases of women, after which followed cases of scrophulosis, syphilis, and diseases of the skin.

There are six springs at this place, of nearly equal chemical composition, of which the most famous is the Elisenbrunnen. The water has a saline taste, and is almost colourless when taken from the spring; but if it stands for some time it becomes turbid, and a yellow-brownish sediment is formed. In one pound of the water (7680 grains) are contained:—

	Grains.
Chloride of sodium	72·922
Chloride of calcium	13·277
Chloride of magnesium	0·251
Chloride of potassium	0·972
Chloride of lithium	0·075
Bromide of sodium	0·307
Iodide of sodium	0·003
Carbonate of baryta	0·299
Carbonate of magnesia	1·351
Carbonate of strontia	0·683
Carbonate of iron	0·199
Carbonate of manganese	0·001
Silica	0·314
Alumina	0·021
Water	7589·314

One of the most important remedial agents at our disposal is the mother-liquor which remains after the water from the springs has been boiled, and the larger part of the chloride of sodium, silica, carbonate of lime, carbonate of magnesia, alumina, iron, and manganese have been removed. This liquid is generally white, but sometimes it has a brownish or yellowish colour; it has an oily consistency, a bitter and unpleasant taste, and feels like a mixture of sand and oil. In one pound of mother-liquor are contained:—

	Grains.
Chloride of calcium	1789·97
Chloride of magnesium	230·81
Chloride of potassium	168·31
Chloride of aluminium	1·56
Chloride of sodium	226·37
Bromide of sodium	59·14
Iodide of sodium	0·05
Chloride of lithium	7·95

and traces of perchloride of iron, chloride of manganese, and phosphoric acid. As large quantities of this liquid are exported, and there was some difficulty connected with the manner of sending it, because, on account of its great specific gravity, it penetrated the joints of the tubs and escaped, especially if it was sent to any distance, the idea occurred to the authorities of having the liquid concentrated to such a degree that, after refrigeration, it would form a hard substance. This is called the salt of mother-liquor. There is, however, a great objection to this proceeding, which Dr. Michels, one of the Physicians of this place, has first pointed out to the Profession; for as the concentrated mother-liquor is poured into the tubs while hot, crystallisation ensues in them after refrigeration, and the different salts contained in the liquor having different points of crystallisation, they, of course, crystallise in layers, of which those at the top of the tub are quite different from those at the bottom. If, therefore, one layer is used after the other, the baths only contain certain parts of the mother-liquor, but never the whole of it, so that its efficacy is lost. It is true that one might again dissolve the whole contents of the tub; but this would be a very inconvenient and troublesome process, and it is, therefore, much better to use it in the liquid state, as was originally done; and if sent in bottles covered with wicker-work it travels quite safely. We also use brine which is highly concentrated in special factories, and which contains, among other elements, more than five grains of bromide of magnesium in sixteen ounces. Even the air in and around the houses where the brine is concentrated may be considered a remedial agent: it greatly resembles the sea-air, and is of great benefit to patients suffering from certain diseases of the respiratory organs. Whey is also much employed here, and it is equal to the best prepared in Switzerland. The goats whose milk is used to prepare the whey have been brought here from Appenzell, and they find excellent meadows in the neighbourhood of Kreuznach.

The efficacy of the springs of this place is dependent partly upon their ingredients, and partly upon their temperature. Every spring has its special temperature, which varies from 54° to 86° F.; they are thus suited to different constitutions; the warmer springs are prescribed for delicate persons with increased sensitiveness, and the cooler ones to those who are disposed to congestions. The temperature, however, is of less consequence than the ingredients of the springs, the curative effects of which are especially to be ascribed to the iodine, bromine, and chlorides contained in the water. They exert most influence in cases where pathological productions have to be absorbed and excreted, and in which the general state of nutrition requires a thorough alteration.

Scrophulosis.—Pathological anatomy has shown that the structural changes in scrophulosis and tuberculosis are of the same character; in both these distempers there is a passive inflammation and a production of tubercular matter which, by destroying the normal tissues, becomes dangerous to the system. But as there is this difference between scrophulosis and tuberculosis, that the former mostly attacks the glands, bones, and mucous membranes, while the latter chiefly invades the lungs, serous membranes, and other tissues, they are also differently affected by the springs of this place; for, while in consumption scarcely any benefit is derived from them, the host of scrofulous diseases, even in their most obstinate and desperate forms, find no better remedy than our Elisenquelle. It is not only in the torpid form of scrofula, in patients with puffed face and lips, thick nose, and lazy habits, but also in the erethic form, where the skin is delicate, the hair blond, the temper lively, and the development of the mind premature, that it exerts a beneficial influence, more especially in cases where the lymphatic glands of the neck, the bronchial and mesenteric glands are affected: in lupus and eczema, in scrofulous caries of the bones and joints, in similar affections of the eye, ear, and the nose, fluor albus, dysmenorrhœa, hypertrophy of the testicles, etc.

Female Complaints.—It is only of late years that much attention has been paid to the diseases of the uterus and the ovaries; and the benefit derived in such cases from the use of the waters of Kreuznach has greatly increased their therapeutic reputation. They seem almost to be a panacea in cases of chronic inflammations of the womb, the vaginal portion and the ovaries, which often causes the formation of neoplasms in those organs; also in that form of inflammation of the ovaries which follows parturition, and often produces sterility and a disposition to miscarriages. At the same time, the hysterical symptoms which almost invariably accompany such lesions, are cured. As displacements of the uterus often exist together with chronic inflammation of that organ, of course, other remedies besides the springs have to be resorted to. Large fibroids of the womb cannot be expected to disappear; but if the waters are used for some time, not only are the troublesome symptoms produced by this disease relieved, but a further development of the tumour is prevented.

Syphilis.—Kreuznach is not to be recommended for all

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cases of syphilis; the springs are useful if pathological exudations are to be absorbed, and indurations to be fluidified. It is especially cases of the so-called tertiary syphilis which are treated with benefit here, as caries, necrosis, and tubercular affections of the skin.

Skin Diseases.—Scrofulous diseases of the skin, such as favus, impetigo, porrigo, and lupus, and all such disorders as are caused by hæmorrhoidal congestions and abdominal plethora,—as psoriasis, eczema, and mentagra, are much benefited by the use of the waters, even if the forms are of a very obstinate character.

ELBERFELD, March 13.

REVIVALISM IN PRUSSIA.

WHEN, some time ago, we heard that Revivals flourished in Ireland, we looked upon the inhabitants of that country with commiseration; but now we may well say, "*Anch' io sono pittore:*" we too have been blessed with Revivals! No doubt you will be interested in an account of the form they took in intellectual Prussia; and I am glad to be able to give you at once the history of the life, death, and post-mortem examination of Revivalism in this country.

About three months ago the Evangelical Alliance inserted in the public papers of Elberfeld a summons to all Christians to join in mutual prayer during the week from January 6 to 13. The objects of this prayer were to be,—effusion of the Holy Ghost over the whole community of the Lord, speedy abolition of all false religions, the full accomplishment of "Thy kingdom come," and, finally, thanksgiving for the Revivals which had taken place up to that time. Upon this the authorities of the Orphan Asylum of this city joined in prayer at the appointed time, and entreated the Lord to show especial mercy to the orphans of Elberfeld whose great levity and frivolity had often grieved the hearts of the authorities. This proceeding, however, and what subsequently occurred in the Orphan Asylum, did not become known until the middle of February, when the *Seedsman* (*Säemann*), the organ of the fanatical party, or "Muckers," as they are called here, brought the following intelligence.

[Our Correspondent here gives a minute account of the effects of excited prayer-meetings upon the children, who became after some days so much excited, that convulsions came on. This part of his letter we omit, and continue his narrative after several days had passed. He continues thus:—]

The following day, which was Sunday, the excitement of the girls was most intense; their moans and groans filled the house. One of them fell down as if dead, and remained rigid for some time. Late at night the Father of the Orphans was called to the general sleeping apartment of the girls. On his arrival there he found them strewn in the corners of the room and under their beds; they were all praying devoutly. He then commenced praying aloud, and the moaning, sobbing, and excitement of the girls rose to the highest pitch. About midnight such of the children as were not too much exhausted were singing hymns on the staircases and in the corridors. On the following day similar scenes took place, with the addition of fits of laughter. Some of the children became cataleptic, and one of the few who had not yet been converted was struck down and convulsed; and, while lying on the ground, he complained that Satan had taken possession of him and closed his mouth so that he could not pray. He called upon one of his friends, who was still unawakened, to come to him, as he wished to embrace him; his features were, however, so distorted, that his friend was afraid to approach him, and when he was at last persuaded to do so, the boy scratched him, and called out, "Pray, or the devil will get hold of you!" By this time thirty-three boys were so exhausted, that they could not leave their beds. By March 13 most of the 295 children who are in the Asylum had been awakened, and it was expected that the others would soon follow.

Before this extraordinary narrative appeared in the *Seedsman* nothing had been known in the town of the proceedings that had taken place in the Orphan Asylum; and the Poor-law officers and the civic authorities now held a special meeting, in which it was unanimously resolved that the Superintendent of the Asylum, M. Grafe, who is at the same time Editor of the *Seedsman*, and all the other *employés* of the Asylum who had taken part in these Revivals, should be at once displaced. The Physician to that Institution, Dr. Urner, was also dismissed. The state of his intellect may be inferred from his opinion on the nature of the phenomena which had just occurred. He said they were no convulsions, for such arose from the brain; but they were phenomena connected with the nervous system! Soon afterwards a Councillor of the Government arrived from Dusseldorf to open an inquiry, when the ex officials and the orphans were examined. It then turned out that the Father of the Orphans had worked upon the imagination of the children by showing them a black devil in effigy, and had then dilated upon the consequences of their continuing to lead a sinful life. Several girls and some more excitable boys had after that become awakened, but had not found many followers. Other means had then been resorted to for effecting the desired result. Those who showed a willing spirit were rewarded with dainties, while the food of the others was deteriorated. Some of the children confessed that they had only begun to scream and pray in order to avoid punishment if they had been naughty or had not finished their tasks. Finally, those who would not join these mad exhibitions had been well beaten by the Father of the Orphans. After the new officials had been installed in the Asylum, one of the boys sought, on one occasion, to avoid punishment, as he had effectually done before, by suddenly roaring and praying; but, as the new master was no partisan of Revivalism, he awarded the boy a sound thrashing for his pains. The awakenings now ceased as suddenly as they had begun. The movement did not at all spread beyond the precincts of the Orphan Asylum; as only one boy in the Gymnasium of the town tried the experiment, but was at once cured by the same recipe.

Such were the Revivals of Elberfeld, of which the "Muckers" had entertained the most brilliant expectations. You may imagine the disappointment of these gentlemen at the intervention of the temporal authorities. The Father of the Orphans, M. Klug, who played so prominent a part in the Revivals, and lost his place in consequence, has been received into the house of a wealthy merchant, who considers him a prophet, and has already settled upon him a considerable annuity. The same merchant has also given a lucrative place in his factory to a gentleman who was formerly master of drawing at the Gymnasium, but was dismissed from there because he said, at a public meeting, that Messrs. Goethe, Schiller, and Shakspeare were no poets, but that all they had written was only fit food for pigs.

I conclude this letter with some remarks lately made on Revivalism by one of our most eminent divines, Kirchenrath Krause, of Berlin. He says that revivals are not the offspring of religion, and are quite foreign to German sentiment and intellect; and, although much trouble is taken to plant this morbid growth here, it will never take root in our soil. Revivals are no miracles, and there is no difficulty in tracing their cause. People in a low state of civilisation are easily excited by preachers who accompany the annunciation of the Gospel with threats of the Devil and hell, and exact a forcible and palpable regeneration from their proselytes. By such and other means they readily succeed in causing distress and anxiety of mind, and hysterical screams and convulsions. It is well known how easily laughing, yawning, crying, tranquillity, passion, and other bodily and mental phenomena, may, when once excited, spread with a certain irresistibility; and this disposition is especially powerful in the uneducated masses, which show scarcely any difference in their actions and feelings, their attitudes, gestures, and general demeanour: indeed it is one of the hardest tasks of moral culture to lead the people from this almost impersonal state into distinct and individual independence of thought and action. It is therefore not to be wondered at that, when rude and sensual people are worked up into a state of frantic excitement, this will spread like an epidemic, especially if a number of diseased persons mix purposely with the crowd of non-infected, and try to convert them to the same state by every means in their power. Thus the so-called conversions are not at all supernatural, but easily to be traced. Christianity is seated neither in the abdomen nor in the nerves, and has nothing to do with "convulsive religion." Revivals have their foundation in vanity and imposture on one, and ignorance and credulity on the other side; and they become rarer in proportion as the nations or classes are advanced in moral and intellectual culture of mind. They never do any good,

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and almost always much mischief; they too often cause madness, and at best, the converts, after the excitement has subsided, suffer from that depression which always follows inebriety. Revivals are closely related to the rudest forms of idolatry, and their pursuit shows barbarism of intellect or vulgarity; they may take place among ignorant, uneducated people, but were they to flourish in Germany and England, this would be a certain sign of national degradation and decline. It is a double crime to excite Revivals among children, as they pervert the mind, engender hypocrisy and falsehood, and in girls often develope hysteria in its most terrible form.

BERLIN, March 14.

ONE of the most excellent clinical teachers at this University is Professor Traube, Physician to the Charité Hospital. After Professor Skoda, of Vienna, he is considered the highest authority in Germany on diseases of the chest; but he by no means confines his attention exclusively to such disorders. There is, in fact, scarcely a branch of pathology to which he has not added the most valuable contributions. He first excited attention by a series of extremely well and accurately conducted observations on the changes of temperature in fever, and by the ingenious and suggestive conclusions he drew from them. He afterwards became famed for his unerring diagnosis of diseases of the chest, and for his almost unrivalled proficiency in auscultation and percussion. His practical "courses" on auscultation and percussion in the Charité Hospital soon attracted a large number, not only of students, but also of Physicians, from all parts of Germany, who wished to increase their knowledge of these phenomena; and it is not too much to say that, if Prussia can boast of an array of Medical men who in accuracy of diagnosis of these important diseases are second to none in the world, it is in a great measure due to the clinical teaching of Professor Traube. For a long time he only belonged to the so-called "private teachers" of this University, and he, as well as Professors Virchow, A. Von Graefe, and others, was, for reasons unknown, much annoyed by the Government, which, especially in the latter years of the just defunct King Frederick William IV., liked nothing better than to annoy, in every possible way, all eminent men, either in social or scientific life, whose heads were seen above the crowd. It only patronised insignificance and mediocrity; but, as men of genius are not easily subdued, even by the worst of Governments, so it was with Virchow, A. Von Graefe, and Traube, all of whom the Government has, much against its inclination, been compelled to raise to the highest places in the Medical Profession. I shall to-day give you an account of some of the more interesting observations which have lately been made in the clinic of Professor Traube, and shall relate some of his remarks thereon.

ON ULCER OF THE STOMACH.

Several patients suffering from ulcer of the stomach, accompanied with unusual symptoms, have lately been observed in Professor Traube's wards. In one of these cases, the chief symptom complained of by the patient—a gardener, aged 27—was oppression on the chest. This oppression, from which the patient said he had already once suffered before, began about three weeks before he was received into the Hospital, and came in longer or shorter paroxysms, which sometimes lasted for hours together; but the patient felt very little pain. There was neither cough nor expectoration; but he lost his appetite, and there was much retching without vomiting, but no bloody emanations. In spite of these symptoms the patient continued at his work, when he was suddenly attacked by violent pains in the abdomen and the shoulder. The former were so vehement that he could not walk upright. He felt a strong desire to relieve his bowels, but did not succeed. On admission he said that he had already once suffered from the same disease. The pulse was at 102; the number of inspirations, which were rather irregular and showed a purely costal type, was 44. The expression of the face was anxious. The abdominal parietes were tense, and very sensitive to pressure. There was a dull sound in both the iliac regions and the right lateral region of the abdomen. On the anterior part of the right side of the chest, below the sixth rib, there was no dull sound as is produced by the liver, which was displaced towards the lateral part of the right side of the chest. The heart and lungs were in a normal condition. Ordered one-third of a grain of pure opium every two hours and cataplasms to the abdomen. During the next two days the pain increased and extended to the axilla. The anxious expression of the physiognomy was more marked, and the face assumed a yellowish hue. He had frequent retchings, and brought up a greenish and yellow liquid; but the bowels remained inactive. The abdomen continued to be very tense. Two-thirds of a grain of opium and one and a-half grains of calomel were now given every two hours, and mercurial ointment was rubbed into the abdomen, the inner surface of the thighs, and the arms. The pulse rose in the evening to 132, the inspirations to 48, the temperature to 120° Fahr. After eating some soup the patient vomited freely. Ice-pills were then added to the other remedies In the night the pain diminished, the pulse sank to 92, the temperature to 118°, but the inspirations increased to 52. On the following day the pulse again rose to 132 in the forenoon, 140 in the evening. All other bad symptoms increased at the same time, and death ensued at 11 o'clock, p.m.

The post-mortem examination showed much gas in the cavity of the peritoneum. The liver was unusually far apart from the ribs; the intestines were much distended, and they stuck to each other and to the lateral part of the parietes by freshly-coagulated fibrine. In the right inguinal region, where the sound had been very dull, much liquid containing fibrine was found. The peritoneum was much injected, and there were also numerous ecchymoses on it. The stomach was almost entirely covered by the liver, and slightly joined to its inferior surface; on its interior part beneath the small curvature, and about three inches from the pylorus a small opening, of about the size of a pea and only loosely covered by a little piece of fibrine was seen, out of which a brownish liquid oozed. The mucous membrane of the stomach was whitish, and the whole of it much thickened; on that part of it which corresponded to the opening just described, a large circular ulcer, of the size of a shilling, was found, which continued into the submucous texture, and was shaped like a funnel. The bottom of the ulcer was smooth, and of a yellow colour; the margin was undermined and sharp; just opposite this ulcer, on the posterior wall of the stomach, a cicatrix, of nearly equal size with the ulcer was seen, which adhered to the peritoneum and the pancreas. The duodenum and jejunum were very much distended, the mucous membrane of the large intestines strongly pigmented, and the follicles swelled. It was, therefore, evident from the post-mortem examination, that the patient was right in stating, that he had already once suffered from the same disease, the final results of which had been the radiated cicatrix on the posterior wall of the stomach. The second ulcer had either begun only about three weeks before death took place, or what is more probable, it had only then commenced to attack larger nervous fibres; but, however, that may be, it is certain that at a time when this ulcer was the only disease under which he laboured, the patient did not complain of anything but of oppression of the chest, besides loss of appetite and retching. The pleurisy, of small extent, which existed at the left side, had certainly not commenced before the peritonitis, as the patient had not coughed nor suffered from stitches in the chest, and had only begun to complain of these symptoms after the peritonitis had set in. Besides, it is well-known that an inflammation of one serous membrane is very apt to spread to another. Some time ago Professor Traube made an injection of the saliva of one rabbit into the trachea of another, and the consequence of this was not only bronchitis, pneumonia, and double pleurisy, but also pericarditis, from which it was evident that the matter which had caused the inflammation, had by diffusion penetrated into the tissue of the pericardium. The same process had obviously taken place in the case just described; a view which is also confirmed by the pleurisy having been at the left side. Professor Traube believed that the fact of oppression of the chest having been produced by an ulcer of the stomach, was to be explained by an irradiation from the sensitive fibres which the vagus sends to the stomach, to other sensitive fibres of the same nerve which animate the lungs, this action taking place within that part of the brain where both are closely connected.

In other cases of ulcer of the stomach, observed by the same Physician, all the symptoms of intercostal neuralgia on

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the left side of the chest were present, and he believes this also to be caused by irradiation from the sensitive fibres of the vagus to the intercostal nerves. He has often found the "painful points" on the ribs, upon which Valleix has laid so much stress, while Romberg and others have denied their existence; but he considers the hyperæsthesia or analgesia, which exists in the affected nerves of the skin during the free intervals, and to which M. Türck, of Vienna, has drawn the attention of the Profession, of far greater importance for the diagnosis, as he has found them in all cases of central as well as of peripheral neuralgia.

ON ATROPHY OF THE KIDNEY, HYPERTROPHY OF THE LEFT VENTRICLE, AND RETINITIS APOPLECTICA.

At one of the last meetings of the Medical Society of Berlin, Professor Traube showed the kidneys and the heart of a patient who had died from atrophy of the kidney, and hypertrophy of the left ventricle. The history of the case was in so far remarkable, as on admission the ophthalmoscopic symptoms of retinitis apoplectica were observed, which disappeared in the course of the treatment, and again became apparent at a later period. During the whole time the patient suffered from, first occipital, and afterwards from intercostal neuralgia; then the pain spread to the right leg, and chiefly affected the muscles, which became painful on pressure, and when they were thrown into motion; this pain appeared suddenly, and was violent; and the patient was obliged to keep the hip and knee-joint flexed, so that one might have been induced to think he suffered from coxitis. The external administration of veratrine relieved the pain at first; but after some time the beneficial effect was lost. The neuralgia, which so frequently supervenes in patients suffering from Bright's disease, has given rise to the idea, that chronic rheumatism is closely connected with it, which is, however, not the case. The retinitis apoplectica, which also often accompanies Bright's disease, is probably caused by the simultaneous hypertrophy of the left ventricle. This hypothesis is rendered likely by the fact, that the former has never been observed without the latter. But while the hæmorrhage taking place in the retina may be explained by the increased pressure in the arterial system, the other pathological changes combined with it, which Mr. Schweigger had shown to be of an inflammatory character, are no doubt dependent upon the increased quantity of urea contained in the blood. If urea, and those matters which are formed by the decomposition of urea, are able to cause inflammation, it will, of course, more readily set in, the greater the quantity of urea which is conveyed to the tissues within a given time. This quantity is (if the disturbance of secretion of the kidneys remain the same) the greater, the more rapidly the extravascular course of the nutritive fluid, which is charged with urea, takes place. The rapidity of this is increased with the pressure in the arteries, as is the case in all instances of atrophy of the kidney, with consecutive hypertrophy of the left ventricle. If the retention of urea in the blood was the only cause of retinitis apoplectica and other secondary symptoms, these ought to be also observed in amyloid degeneration of the kidneys, in which the excretion of urea is often materially diminished; but they never occur in cases of this kind, unless hypertrophy of the left ventricle is also present.

LARYNGOSCOPIC OBSERVATIONS.

A patient suffering from aneurism of the arch of the aorta was lately received into Professor Traube's wards. He had for some time suffered from rheumatic pains in the shoulders, the arms and the sacrum, but they were never so violent that he was obliged to keep to his bed. The disease began in June, 1859, when he was attacked by a cough, which had never left him since then, and prevented him from lying upon his back. After some time greenish sputa were observed, which became mixed with blood three weeks before he was admitted into the Hospital. When he tries to work he suffers from dyspnœa. Three weeks before admission a sudden change in the voice took place, which the patient, who describes himself as a man of fiery temper, said was due to a violent excitement; the voice became hoarse, weaker, and remarkably higher in pitch. This change has been a permanent one. He also finds it difficult to swallow large bits of food, as they are generally stopped in the region of the fossa jugularis. If he drinks incautiously, the liquid is apt to flow into the larynx and the wind-pipe, so that he is then obliged to cough violently. During the last months he has besides suffered from pain in the left temple, which seldom leaves him. The pulse was 96, small, and regular. The radial arteries of a small circumference. The pulse was a great deal smaller in the left than in the right radial artery, and the same was the case in the carotids. The crural arteries had a medium circumference, and pulsated at the same time with the radial arteries. There was a systolic murmur in the carotids, which was louder in the right than in the left artery; the diastolic sound was weak in the right carotid and loud in the left. The anterior and external jugular veins were swelled, the right more so than the left. Besides, two other veins were visibly swelled, one of which was at the anterior part of the left side of the chest, while the other proceeded from the umbilicus on the linea alba, straight upwards, and both united on the point of the xiphoid process. The direction of the current of the blood was, in both of them, from the head towards the umbilicus. The skin showed nowhere a cyanotic colour. The impulse of the heart was in the sixth intercostal space. There was a weak and short systolic murmur everywhere, which was strongest above the third left rib, near the margin of the sternum; and a distinct diastolic sound, which was strongest in the second intercostal space at the right side of the sternum. With every systole of the ventricles the manubrium sterni and the adjoining cartilages of the ribs were raised, which could not only be felt by the hand, but was also easily visible. The sound on the manubrium was very dull, and extended to the right side, up to the cartilage of the second rib.

The situation and shape of the larynx were not changed. On examination by the laryngoscope, the epiglottis appeared to be singularly mis-shaped, and its curvature being diverted towards the left side and more acute than in the normal state. The mucous membrane was much injected. The prominences corresponding to the arytaenoid cartilages were also unusually reddened, but otherwise normal. The true vocal cords were quite normal, the glottis was scarcely narrowed; but the left vocal cord was motionless. When the patient tried to pronounce a prolonged "ah," the left cord remained quite quiet, while the right rapidly approached the middle line. Nearly the same was the case with the arytaenoid cartilages, although the left cartilage did not seem so entirely motionless as the left cord. Between the two cords a considerable cleft was visible.

Professor Traube said that it was quite evident that these phenomena were caused by a paralytic state of the left inferior laryngeal nerve; and he thought that the paralysis was due to an increase in the volume of the aneurismatic sac, which occurred three months ago, in consequence of mental excitement; thereby the nerve surrounding the sac was so much stretched that it lost its conductibility. This case was in so far interesting, as the patient, when he entered the Hospital, complained only of the change in his voice, and that Professor Traube was first led to look for an aneurism by the laryngoscopic examination. At the same time, he acknowledged that, from the physiological facts of the case, he was unable to give a satisfactory explanation as to why the pitch of the voice should be raised by paralysis of the inferior laryngeal nerve.

THE ELECTRIC LIGHT.—At the last sitting of the Paris Academy of Sciences, M. Faye made some further remarks on the application of the electric light to street illumination. He stated that as the light was equal to that of 180 carcel-lamps, it had the great inconvenience of dazzling the eyes of the spectator. To remedy this, they had put on globes of dull-roughed glass, thus sacrificing five-sixths of the light produced. He would, however, propose another expedient, viz., a wide glass hemisphere turned downwards, slightly roughed outside but polished inside, while its upper zone should be silvered within, so as to act as a mirror, which would cast on the ground all those rays which are now lost, being radiated upwards. The lower zone, where the silvered portions ends, will then transmit a softened light to the windows of the neighbouring houses. We trust, for our part, remarks *Galignani*, that the very doubtful improvement of replacing gas by the electric light will not be adopted until it be satisfactorily proved that the intense glare peculiar to this light will not generate chronic ophthalmia all over Paris.

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GENERAL CORRESPONDENCE.

REMOVAL OF THE COCCYX IN COCCYODYNIA.

LETTER FROM DR. SIMPSON.

[To the Editor of the Medical Times and Gazette.]

SIR,—In a lecture on Coccyodynia, published in your Journal in July, 1860, I described a case of the disease in which I cut down upon and removed the coccyx. In the instance in question I had recourse to this measure because the measure which I almost always find successful, viz. isolation of the bone by the tenotomy knife, and all other means, had failed to relieve the patient, and because in consequence of her sufferings from the coccyodynia, she was utterly incapacitated from any longer earning her livelihood by her usual occupation. The operation was followed by her complete and perfect cure. She has been a patient in the Hospital during this winter, but for a disease of the uterus.

When I removed the coccyx in the poor patient to whom I allude, I fancied that it was the first instance in which such an operation had been had recourse to; but by the last American mail I have received a letter from a distinguished American Surgeon, Professor Nott, telling me that many long years before the date of my case, he had performed the same operation for the same disease, and published an account of it.

I hasten to send you Dr. Nott's letter for publication in the *Medical Times and Gazette*, as I would be sorry indeed to have it supposed that I laid claim to a Surgical operation which turns out, as in this instance, to have been previously practised and described by another member of the Profession.

I am, &c.

52, Queen-street, Edinburgh, March 19. J. Y. SIMPSON.

Mohill, Alabama, United States,
February 25, 1861.

DEAR SIR,—In looking this morning over one of my journals I saw recorded your article on Coccyodynia, which I read with much pleasure and instruction.

The symptoms of the affection are so palpable, the pathology, if not obvious, so intimately connected with a point, and the remedy so rational, that I cannot imagine how your general course of reasoning should have been so long overlooked by the Profession.

After having met with many other cases which had greatly annoyed me, one of four years' standing presented itself to me in 1832, in which the sufferings were intense and prolonged beyond description. I removed the coccyx with perfect relief, and the case was published in the *American Journal of Medical Sciences*, vol. iii. p. 113 (1833).

Since that time I have operated on and published other cases. While on a visit to Philadelphia, several years ago, I paid a visit to my old friend Professor Meigs, and in conversation mentioned the subject. He seemed so much interested in the matter that I sent him two of my specimens, which he has annually exhibited to his class since.

I attach no importance to priority in a matter of this kind, but am much gratified in having the weight of your name in support of an operation which I think destined to relieve much suffering. I am, Sir, very respectfully,

Your obedient Servant,

J. C. NOTT,

Professor of Surgery in Alabama Medical College.

To Professor Simpson.

THE PREVAILING DISEASE AMONG CATTLE, AND DISEASED MEAT.

LETTER FROM DR. EDWIN BISHOP.

[To the Editor of the Medical Times and Gazette.]

SIR,—I have already brought prominently before the public the extensive sales of diseased meat, and which you did me the honour to quote in the columns of the *Medical Times and Gazette*. Until now I was not aware of the extent of the disease among cattle, in sheep more especially, which is now assuming a very serious character. The question is one of the gravest importance to the public, and while extensive seizures are made from week to week, in London and the country markets, it would be well if the character of the malady were fully investigated, and means adopted, if possible, to prevent the immense sacrifice which is going on of the most nutritious and important food of man.

On the borders of Dartmoor, and on the Moor itself, vast flocks of sheep are reared, and in several instances the farmers have lost more than one-half. This is a serious matter. The lambing season is now active, and from personal investigation, I fear that in thousands of cases it will be found that the diseased ewe will transmit the disease to the lamb. This county, it appears, forms no exception to the prevailing disease among sheep, and when we contemplate the loss which the country, as a whole, has sustained, and will sustain, it is no trivial matter. Very few districts in England can be found quite free from the malady, which appears to be malignant "rot," but especially does it prevail on cold, wet, and undrained lands.

In all probability the more enlightened members of the Veterinary Colleges will be able to suggest some plan for preventing the spread of the malady, or if it succeed only to limit the spread, their energies would be hailed as a very great boon.

I am, &c.

EDWIN BISHOP, M.D.

Moretonhampstead, Devon, March 5.

UNIFORM GAUGE FOR CATHETERS.

LETTER FROM DR. DICK.

[To the Editor of the Medical Times and Gazette.]

SIR,—Having seen an article in your valuable periodical of February 23 by Mr. Henry Smith, in reference to the use of minutely increasing the size of bougies with the adoption of an uniform graduating gauge for the treatment of strictures of the urethra, I beg to state that, for the last fifteen years, I have used such a gauge, and I have given a full description of it, with a drawing, in my book on gleet. The late Dr. Benniqué, of Paris, was the inventor.

I am, &c.

HENRY DICK.

59, Wimpole-street, Cavendish-square, March 15.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, FEBRUARY 12, 1861.

DR. BABINGTON, President, in the Chair.

The PRESIDENT said that on the first night on which he was called to preside over the meeting of the Medical and Chirurgical Society he would take the opportunity of thanking the members for the honour conferred on him: he considered that it was the greatest the Medical Profession had in its gift. He would endeavour by deeds to show that the interests of the Society should not fail in his hands. He could remember the institution of the Society. His god-father, Dr. Saunders, was the first President, and he (Dr. Babington) had been personally acquainted with thirteen members in the first Council.

A Paper, by DR. MARKHAM, was read, entitled

REMARKS ON THE CAUSE OF THE CLOSURE OF THE VALVES OF THE HEART.

DR. MARKHAM stated that the usually-received accounts of the mode of closure of the heart's valves were unsatisfactory, and incapable of fully explaining the phenomena attending it. The closure is effected during different periods of the heart's action, and may be divided into two stages. During the first stage (*i.e.*, during the ventricular diastole) the valves gradually rise upwards towards each other, *pari passu* with the distention of the ventricles, so that their free borders come into loose contact. The second stage corresponds with the ventricular systole, whereby the valves are suddenly and

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forcibly brought into firm and perfect contact by the pressure of the blood. The Author considers that a satisfactory explanation of the cause of the first stage of this closure has not yet been given. The usually-received explanation is that the blood during the ventricular diastole raises the valves up towards each other. But this is manifestly incorrect, because the pressure of the blood passing from the auricle to the ventricle must be as great upon the auricular as upon the ventricular surface of the valves; it is, in fact, greater. On investigation, Dr. Markham satisfied himself that the valves are raised towards each other during this first stage of their closure by the agency of elastic tissue, this elastic tissue, being so disposed in the valves as to act in a manner at once most simple and effective. The auriculo-ventricular and the semilunar valves have all essentially the same structure. They are formed of elastic membrane, and inelastic white fibrous cords. In the case of the auriculo-ventricular valves, as observed in a bullock's heart, a thickish layer of elastic membrane may be readily dissected from the auricular surface of the valve, being loosely attached, except at the free edge of the valve, where it becomes blended with the under layer. This elastic membrane is retractile in all directions, but its fibres seem to run chiefly in a direction from the attached to the loose border of the valves. The lower (ventricular) surface of the valves may be said to consist of white fibrous cords—the prolongations into them of the chordæ tendineæ, united together by elastic tissue; the lower borders of these cords projecting from the under surface of the valves, giving them a furrowed appearance. In consequence of the disposition of the elastic fibres, the free borders of the valves have a tendency (when their elastic tissue is brought into play) to approach their attached borders, and in the direction of the auricular surface of the valves. At the end of the ventricular systole the valves are pressed down into the ventricles and lie flat against the inner walls, and the elastic tissue is put on the stretch. Then, during diastole, as the blood flows into the ventricles, the weight of the valves is diminished, and so the elasticity of the stretched elastic membrane is permitted to come into play. This contraction of the elastic tissue causes the closure of the valves during the first stage referred to. Anyone may readily satisfy himself that no other explanation of the phenomenon is possible. When the auricles are removed from the ventricles, the coagulated blood carefully removed, and water poured into the ventricles, it will be seen that the valves (if healthy) not only rise up towards each other as the water flows in, but that they remain in contact when the current is arrested, and will, if depressed in the water, again rise towards each other when the pressure is removed. As the specific gravity of the valves is considerably greater than that of blood, it is evident that no other moving force than that of elastic tissue can be in action here. Exactly the same disposition of parts occurs in the semilunar valves, with this necessary difference—that the elastic layer is spread over their ventricular surface. The object is here manifestly the same as in the former case,—namely, to assist in drawing the valves away from the arterial walls, so as to put them in a position of being readily brought together at the instant the ventricular systole ceases. These facts may, perhaps, explain some points in diagnosis which have hitherto puzzled the auscultator; for instance, the cause of a cardiac murmur heard during life in cases where the valves have been found, after death, to all appearance competent. In such cases we may fairly suppose that the elastic tissue is impaired, and thus regurgitation permitted at the commencement of the ventricular systole. We may also assume that to prove the capacity of the auriculo-ventricular valves for effective closure, we must try them, as above described, by removing the auricles and filling the ventricles with water.

The President asked if the Author had found elastic tissue in the valves of the human heart as well as in those of the hearts of animals.

The Author referred to a specimen of a human heart which was then on the table, in which the mitral valve was perfectly closed, but in which one segment of the tricuspid valve had fallen away. This segment, it was found, was thickened, and hence its elasticity was lost, and it had not risen like the others.

Mr. Partridge wished to know if precautions had been taken to prevent the insinuation of air under the lining membrane of the valves. If not, the valve, being thus rendered lighter, would rise from that cause only.

The Author replied that an inspection of one of the hearts on the table would convince Mr. Partridge that such a source of error did not exist. The heart might be turned over, and yet the valves could not rise into the ventricle (in this position the highest point), as they would have done if they were influenced by the physical law—the result of the differing specific gravity of the valves and the fluid.

Dr. Sibson had been present at most of Dr. Markham's experiments. He could fully confirm the results he had arrived at. Not only would the valves rise up, but even when cut away they would curl up on their auricular surface.

Dr. C. J. B. Williams considered that the experiments and deductions of the author seemed to throw light on one part of the action of the mitral valves; but he did not think that the existence of elastic tissue would constitute more than a subordinate agency in their function. He thought that the mechanism of the valves, as commonly explained, was sufficient to effect closure during systole; but that through the action of this elastic tissue, they might be approximated at the end, or diastole. He believed that the action of the valves in diastole alluded to by Dr. Markham, although not enough in itself to effect closure, yet by raising them from the sides of the ventricle, would enable them to be influenced by the pressure of blood, and thus closed in systole. He did not think that elastic tissue could exert any very great power in closing the mitral valves, as any such power would be utterly insignificant when opposed to the whole weight of the systemic circulation, which at each systole the mitral valves had to bear. Dr. Williams also alluded to experiments which, more than twenty years ago, he had performed on the hearts of several animals (ox, ass, calf, etc.). He then, on plunging the heart in water and on creating a current from the ventricle to the auricle, found that the margins of the valves readily approximated and closed. He believed that the valvular adaptation, independent of the action of the columnæ carneæ, was more complete than was generally supposed, although this action is essential to prevent regurgitation during full ventricular systole. In reference to the pathological relations of this subject, Dr. Williams said that cases had been reported in which there existed mitral regurgitant murmurs, and yet there was no lesion discovered after death. He would not say that this was impossible as an accidental occurrence, the murmur being caused by imperfect closure of the valves, the result of displacement of the heart. He had been able to produce this artificially in animals by pressure, even through the parietes of the chest. The point, however, to which he wished particularly to refer was that in the very earliest stage of endocarditis, before there was time for effusion of lymph, he had found a regurgitant mitral murmur; and many years ago he had arrived at the conclusion that such murmurs were due to imperfect closure of the valves from irregular action of the columnæ carneæ. As we find that often in endocarditis only limited parts of the lining membrane are affected, he believed that one set only of the fleshy columns might be rendered unduly irritable and contract in excess during the first stage of inflammation, that of exaltation of functions, and that it might be partially paralysed and fail in its contraction in the second stage, even when there was no effusion of lymph. In either case there would be regurgitation and a murmur. Whether in neurosis of the heart a similar irregular action of one set of the fleshy columns might occur is much more doubtful. He did not believe that it was probable, and would conclude by affirming his conviction that in all cases of permanent mitral murmurs the cause is organic.

Dr. Halford believed that the author had overlooked one point in his experiments, viz., the difference in the size of the ventricle before and after distension. Neither could he understand why Dr. Markham should object to the application of the hydrostatic law of the pressure of fluid equally in all directions in the case of the heart. The author believed that the blood forced from the auricle would exert more pressure on the auricular surface of the valve than on the ventricular. He (Dr. Halford) believed that if there were any difference, the contrary was the fact, that the pressure was greater on the under surface, and also that the closure of the valve was due to the pressure of the blood on that surface. Dr. Halford stated that in birds there was a mere trace of elastic tissue in the valves, and yet the mechanism appeared perfect.

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He could not understand how closure of the valves could take place during diastole. It must, he believed, take place during systole.

The Author, in reply, stated, that several points in his paper appeared to have been misunderstood, and, perhaps, on account of its brevity, as he had put as few words into it as possible. If Dr. Halford would look at the specimens on the table, he would find that the valves floated up in the water, although of greater specific gravity than water. What sustains and raises them up is the question? Evidently the elastic tissue within them. The author had turned his attention to the subject, because, on consideration, it seemed clear, that the valves, to act efficiently, should be in loose apposition when the ventricular diastole is complete, so that the instant the systole occurs, they may be pressed firmly together, and firmly close the auriculo-ventricular orifice. If the valves were closed solely by the ventricular systole, it is manifest, that regurgitation must occur during the time that the valves were in the act of closing. Any one may readily satisfy himself, by the simplest experiment, that the valves do float upwards towards each during diastole, and that they are sustained in their up-raised position simply by their elastic tissue. It is necessary in performing the experiment to keep the heart as far as may be in its natural position, suspended by its great vessels, or otherwise, the walls of the ventricles by falling apart will drag the valves away from each other. The most perfect demonstration of the fact is obtained by separating a valve—say the anterior mitral valve—with the ventricular wall to which it is attached, and placing it in water; which ever way the valve is placed, it will be seen that it tends to approach the auricular border of the ventricular wall.

A Paper, by Mr. Joseph Toynbee, was read, entitled

PATHOLOGICAL RESEARCHES INTO THE DISEASES OF THE EAR (SEVENTH SERIES). MOLLUSCOUS TUMOURS IN THE EXTERNAL AUDITORY MEATUS, THEIR EFFECTS ON THE PETROUS BONE AND THE BRAIN, WITH SUGGESTIONS REGARDING THEIR TREATMENT.

The Author commenced his Paper by stating that in a tabular view of the morbid appearances found in the dissection of 1013 diseased ears, published in the thirty-eighth volume of the *Medico-Chirurgical Transactions*, he reported ten instances in which a molluscous tumour was developed in the external auditory meatus. Since the publication of that tabular statement, the Author has met with several additional cases of molluscous disease in the ear, and he gives the result of his experience of this disease in the present Paper. Although molluscous disease has frequently been described by Surgeons as occurring in various parts of the integuments, its presence in the outer meatus of the ear has not attracted their notice, notwithstanding the injurious effects so often produced upon the petrous bone and sometimes upon the brain. Mr. Toynbee supposes that these cases have hitherto been comprised under the terms *otitis* and *otorrhœa*, and where the death of the patient has occurred, its cause seems to have been ascribed to caries of the petrous bone, originating in otorrhœa. The singular characteristic of this disease, as pointed out by the Author, is the tendency of the tumour to advance inwards, and cause absorption of the petrous bone. Thus in the eighteen cases of this disease dissected by the Author (and the whole of the preparations, with several drawings, were laid before the Society), although the tumour had varied in size from that of a millet-seed to a hazel-nut, the petrous bone was more or less absorbed in every instance. This absorption of the petrous bone had taken place without the production of caries, or even inflammation of the osseous tissue; indeed the apertures made by the tumour had well-defined margins, as if effected by a chisel. In some instances the meatus is so greatly dilated by the tumour as to admit of the passage of the finger, as far as the membrana tympani. The effect of the tumour is to produce abscess in the brain, the result of irritation within the ear; in the cerebellum, when the posterior part of the meatus is the seat of the disease; in the cerebrum when the upper part is attacked by it. The circumstance that the presence of a molluscous tumour in the ear seems capable, by the irritation it induces, to produce an abscess in the brain is adduced as additional evidence in favour of the opinion, that when abscess in the brain co-exists with disease of the petrous bone, the abscess, as a general rule, is caused by the affection of the ear, and the disease of the petrous bone is not produced by the abscess in the brain. Molluscous tumours, by their effect on the membrana tympani and tympanic cavity, frequently cause deafness of a serious character. The membrana tympani is often perforated, and sometimes so pressed inwards as to be in contact with the promontory. *Treatment.*—Considering the tendency of molluscous tumours, when developed in the outer meatus of the ear, to advance inwards, and thus injure the membrana tympani, the petrous bone, and the brain, it is desirable that they should be removed at an early period of their development. For this purpose, in the early stages, before the bone is seriously affected, the tumour should be laid freely open by a crucial incision, and the contents, as well as the capsule, wholly removed. In the later stages, when the attached surface of the tumour lodged in the petrous bone may possibly be in contact with the dura mater, considerable caution and delicacy are required to secure its removal. A crucial incision may be made into the tumour, and the laminated contents removed by the lever-ring forceps. In cases where the tumour has opened towards the meatus, and a copious fetid discharge is poured out, the syringe and warm water may be used for the purpose of removing the softened contents of the tumour. The process of syringing should be continued; for notwithstanding the free discharge into the meatus, the tendency of the tumour is to develope itself towards its attached surface, and cause injury to the brain. The author proceeded to give details of six cases of molluscous tumour, with the post-mortem appearances. He subsequently placed in a tabular view the histories, symptoms, and morbid appearances of the eighteen cases which had fallen under his notice, and he finally cited one or two cases treated successfully, and where the removal of the tumour had caused a cessation of the pain, discharge, and cerebral symptoms.

Mr. Harvey wished to know if the Author had seen the patients whose cases he narrated whilst the disease was in its early stage. He (Mr. Harvey) doubted whether they were molluscous tumours. He believed that they were acute inflammation of the dermoid layer of the meatus. He believed that any Surgeon would conceive it an act of temerity to dissect out such tumours, especially when they were so deeply situated. He had considered it simply necessary to empty them, and then use astringent injections. He wished to know if the Author, in the kind of meningitis following such cases, had adopted the practice of making incisions in the structure covering the mastoid process.

The Author remarked that the specimens he exhibited showed every stage of the disease, from a molluscous tumour the size of a millet-seed to one the size of a hazel nut. It had nothing to do with inflammation, and was not in any way connected with disease of the mastoid cells. It was simply a sebiparous tumour, and had the singular property of absorbing bone, and although it might discharge its contents, it would enlarge inwards, the edges of the bone through which it made its way not being diseased. The treatment, he said, consisted not in combatting inflammation, but in removing the disease. If the contents of the tumour were merely evacuated, it would fill again and again, and as any irritation propagated from the ear might cause death by abscess in the brain, there being healthy brain between the abscess and the ear, he considered that it was of the utmost importance to effect complete removal.

THE PATHOLOGICAL SOCIETY.

Tuesday, March 5, 1861.

Dr. Copland, President, in the Chair.

(Continued from page 290.)

Dr. Hare exhibited two kidneys, showing in a well-marked manner the results of

CHRONIC CALCULOUS PYELITIS.

They were removed from the body of a female, aged 57, who had suffered (according to the history given by Mr. Francis Clarke, under whose care she had chiefly been,) for some fifteen years from symptoms of the disease, having had much pain in the renal regions with occasional sickness and vomiting, and having sometimes passed considerable quantities of

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bloody urine. Of late years the pain had been much worse than before, and almost constant, but much aggravated by any exertion. Notwithstanding her sufferings she remained stout up to the period of her death, which was preceded, for about a week, by a much diminished secretion of urine, by constant sickness, by loss of sight and coma. The two kidneys presented, essentially, the same characters, though the morbid alterations appeared to have progressed somewhat more in the left than in the right one. The entire bulk of each organ was considerably greater than natural; this was partly due to a considerable deposit of fat in the pelves of the kidneys, but chiefly to the fact of the great dilatation which the infundibula and calyces had undergone, so that the latter, when distended with fluid, formed considerable prominences with very thin parietes on the surface of the organs. In the cavities thus formed, variously-sized calculi were found: many were very small (mustard or hemp-seed size), while two or three were about the size and shape of cherry-stones, and one or two in each kidney were of an irregularly-triangular form, presenting very pointed angles or horns which might very readily, by irritating or wounding the kidney, produce hæmorrhage. The calculi consisted of lithic acid and lithate of ammonia, and the larger ones had a coating of phosphates; one of these larger irregularly-triangular ones measured nearly one inch and a-half in its longest diameter.

Dr. C. J. B. Williams would refer to one point which had often presented to him a difficulty, viz., why it was that in calculous pyelitis the span of life varied so very much in different cases. Some patients would, in spite of the great distress and pain, live on for years; in other instances the disease would prove fatal in a few months. He would submit that, in the latter class of cases, the disease of the kidney caused death rapidly, from the fact of the general constitutional powers being also much impaired, just as disease of any other important organ would produce death more rapidly under such circumstances. A little irritation would, in such cases, suffice to produce inflammation and subsequent inflammatory deposits, and that the deposits would undergo more rapid degeneration. He alluded to a case which he had lately under care, in which the duration of the disease was only sixteen months. In this case there was great emaciation, the urine was of low specific gravity, and contained albumen. He believed that, in this case, the parenchyma of the kidney had been affected very early.

Dr. Harr agreed with Dr. Williams as to the cause of the great difference in the duration of life in case of calculus of the kidney. He would add that the calculus might for a long time remain encysted, and would, therefore, create less disturbance than it would if it were loose and liable to be occasionally impacted in the ureter, interfering with the functions of the kidney, and causing irritation.

Mr. Hutchinson exhibited drawings and a specimen from a case of

CONGENITAL UMBILICAL HERNIA CONTAINING THE LIVER.

The patient, a very small infant, aged three weeks, came under care with a tumour protruding at the umbilicus the size of an adult fist, and presenting an ulcerated surface over its whole extent. The history was that it had been born with the protrusion, but that the latter had increased, and the integuments had given way. It was found impossible to reduce the protrusion even under the influence of chloroform. The contents felt solid and firm, and might be forcibly pushed back somewhat, but returned immediately that pressure was removed. The hernial sac seemed, indeed, to have no contraction whatever at its neck, and the protrusion was consequently in the form of a bee-hive. It would have been quite impracticable to have united the integuments over the protrusion, and the latter was therefore confined as tightly as prudent by broad strips of plaster which encircled the child's body. In this way great diminution in the prominence of the tumour was obtained, and there appeared a fair probability that it might eventually be reduced, and allow of the skin healing over it. After about three weeks, however, the child was suddenly carried off by an attack of bronchitis. There had never been any obstruction to the action of the bowels. At the autopsy, the hernial protrusion was found to contain almost the whole of the liver, which was most firmly adherent to the peritoneum and fascia, which constituted the only investments. The liver was transposed, and its lobes so irregularly misshapen that it was very difficult to identify its several parts. The two recti muscles, from their pubic to their thoracic insertion, were widely apart, leaving a most extensive eliptical interspace. The pyramidales were wanting. No other abnormity was observed in the body.

Mr. Nunn then exhibited a cast showing

MALFORMED TEETH, FROM A CHILD THE SUBJECT OF HEREDITARY SYPHILIS.

The two central upper incisors were, as usual, the teeth most typically altered. He brought the specimen forward in order to illustrate Mr. Hutchinson's views, who first drew attention to the connexion between certain malformations of the teeth and hereditary syphilis. The subject of the case was a girl, aged 10, who had all her life suffered severely from symptoms of inherited syphilis. She had had interstitial keratitis, nodes, palmar fissures, and had lost her hair.

Mr. Henry Thompson stated that he had been one of the committee appointed to examine the cases brought forward by Mr. Hutchinson in support of his views. Mr. Hutchinson exhibited casts to the Society, and the committee saw the cases from which they were taken. The committee then gave a qualified opinion. The cases they saw gave very strong evidence in support of the view; but it could not be too strongly urged that the proof that such teeth were *always* signs of syphilis was defective. Mr. Thompson admitted that some low forms of inflammation caused defective action in the tooth pulps, but such inflammation might or might not be due to syphilis. He had amongst his out-patients frequently found such teeth in cases in which there was no history of syphilis.

The President stated that it was not at all unusual to find malformation in the teeth of children whose constitution was impaired from struma and other morbid conditions.

Dr. Graily Hewett agreed with Mr. Henry Thompson that the evidence was still incomplete. In all the cases, however, which Mr. Hutchinson had brought before the committee there was well-marked history of syphilis. Where the committee stopped in arriving at definite conclusions was in making a large generalization from a limited number of cases.

Mr. Hulke said that in many of such cases which had come under his notice there was a history of syphilis, but again in many others there was no such history.

Mr. Barwell said that he had then under care a child whose teeth presented the appearances described by Mr. Hutchinson as characteristic of hereditary syphilis. In this case, although the father, who was several times questioned, acknowledged to having had gonorrhœa, yet he denied having ever had syphilis. The child was delicate and rickety, but he did not believe there was any trace of syphilis.

Mr. Henry Thompson exhibited (for Mr. Cadge, of Norwich,) a specimen of

CALCULUS

encysted in the walls of the bladder. The specimen had been removed from the bladder during the operation of lithotomy. A calculus had been removed by Mr. Cross, at a previous operation, when a projection not far from the neck of the bladder, had been felt, and was then believed to have been a fibrous tumour of the prostate. At the second operation, in attempting to remove a stone which was loose in the bladder, the blades of the forceps embraced the projection, and brought away the calculus with adherent mucous membrane. The man recovered rapidly from the operation.

A discussion then took place as to the part of the bladder in which the calculus was encysted.

Dr. Wilks had examined two cases of encysted calculus, and had come to the conclusion that they were not, in the exact sense of the word, encysted in the bladder. In both cases they were situated near the entrance of the ureter, and were, he believed, lodged in a dilatation between the ureter and the bladder.

Mr. Coulson believed that Dr. Wilks' explanation was the correct one. He had never seen a case in which a calculus was encysted near the neck of the bladder.

Mr. Henry Thompson had seen cases similar to those referred to by Dr. Wilks. They were well recognised, but were, he believed, exceptional. He believed that calculi became encysted from the deposit of a small piece of calculus in a saculus of the bladder, and that this subsequently

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enlarged and became encysted. He had two specimens which he would bring before the Society which would, he believed, show that a calculus might become encysted in such manner. He had also seen a case of encysted calculus near the neck of the bladder,—not prostatic.

Mr. Partridge had also seen a case in which a calculus, not prostatic, was encysted near the neck of the bladder.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, March 6, 1861.

Dr. Tyler Smith, President, in the Chair.

(Continued from page 291.)

A paper, by Dr. Madge, was read, on

UTERINE HÆMATOCELE.

Mrs. L., aged 34, had been married thirteen years, and had three children, the eldest being now 11 and the youngest 6 years of age. Had inflammation of the bowels six years ago, and has not been pregnant since. Appearance healthy and vigorous; catamenia regular. On October 27, 1860, the menstrual discharge having existed two days, she was attacked with violent pains in the hypogastric region, and was treated for local peritonitis. In a week she was getting on well, but imprudently went out of doors. While walking the catamenia appeared in increased quantity; a feeling of faintness came on, and she was brought home in a state of collapse. This lasted until the following day. When reaction took place, peritoneal symptoms were very evident in the lower part of the abdomen; and with these symptoms there was now a large abdominal tumour, extremely tender to the touch, extending to the umbilicus and into the pelvis, and was found, by vaginal and rectal examinations, occupying the whole of the posterior part of the pelvic cavity. The uterus was retroverted, and the os uteri pressed up behind the symphysis pubis. During the next few days she suffered severely from acute peritonitis; but gradually the severe symptoms subsided, leaving the abdominal pelvic tumour unchanged in shape and extent. About the middle of November a discharge of a large quantity of blood took place per rectum; the pelvic part only of the tumour seemed to be affected and partially emptied by it, the abdominal portion remaining as hard and large as before. When the monthly period arrived the catamenia appeared, and lasted two days. On the second day of its appearance, many of the symptoms which were present at the onset again showed themselves—the anæmic condition, partial collapse, and pain in and around the abdominal tumour, being the most prominent. It was evident that a fresh accession of internal hæmorrhage had taken place. She soon rallied, and was in many respects improving, when phlegmasia dolens in a severe form attacked the left leg, and a week afterwards, the right leg became affected with a similar, though milder, attack. This double seizure completely prostrated the patient's powers. When the next menstrual period arrived there was a slight discharge during one day, but on the next day there was a profuse discharge of altered blood and clots per rectum. This continued two days, and must have amounted to three or four pints. The abdominal tumour speedily disappeared; extreme prostration came on; and she died on December 8. At the post-mortem examination a large cavity forming the hæmatocele was found occupying the pelvis behind the uterus, bounded above by the intestines matted together, and behind by the rectum; being, in fact, the utero-rectal peritoneal culde-sac extended and altered by disease. A large clot, several small clots, and a pint of blood were taken from the cavity. The interior of the latter was of a dark leaden hue (the same dark hue pervaded nearly all the intestines). The walls were shreddy and uneven, as if from irregular deposit of lymph and fibrin. In some places long bands of false membrane were hanging loosely. One large band divided the sack into two nearly equal parts, and through this septum there was an opening about the size of half-a-crown. It was the giving way of this band, which had hitherto secured the contents of the upper portion of the hæmatocele, that appeared to be the immediate cause of death. At the upper part of the left broad ligament there was an opening about the size of a fourpenny-piece, on the one side communicating with the capsule of the left ovary, and on the other with the upper division of the large cavity lying behind it. The capsule of the ovary was distended to about the size of an orange, and was divided into two distinct cells by a firm band, each cell containing blood and clots. The small opening in the broad ligament opened into the smaller of the two ovarian cells. A small portion of ovarian substance or stroma, covered by a corresponding portion of capsule, was all that remained of the ovary. There was no opening in the right broad ligament, but behind the ovary which it contained there existed (and still exists in the preparation) a firm mass of false membrane and fibrin, which seems to be inseparable from the peritoneal covering. The ovary itself was congested and enlarged, and fixed in its position by adhesions. The stroma was healthy. On cutting into it, five or six small clots shelled out of little cavities—distended Graafian vesicles. One of these contained a clot the size of a pea; another near it appeared to have only recently closed up, and formed a well-marked cicatrix. A few healthy Graafian vesicles were also seen, containing transparent fluid. In the general peritoneal cavity the inflammatory adhesions did not extend anteriorly beyond the fundus uteri. The peritoneal coverings of the anterior surface of the uterus, of the bladder, and of all the abdominal viscera, were smooth and healthy. The broad ligaments were thickened and opaque, partly owing to false membrane between the two layers, the result of external peritonitis. The uterus was slightly enlarged, the mucous lining being thickened, and at its lower part striated with blood vessels, having somewhat the appearance of an incipient decidua; there was, however, no glutinous matter in the neck, nor did the latter wear any of the appearances common to pregnancy. The left Fallopian tube was totally impervious; the right was closed at the ostium uterinum, and was pervious to the extent of half an inch at its fimbriated extremity. The rectum, when laid open, was observed to be very dark from congestion. This rapidly shaded away above into a healthy condition, but below continued to its lower extremity. In the midst of the darkest patch, in the upper third of the rectum, and nearly on a level with the normal position of the os uteri, there were two irregular transverse openings in a line with each other. The breach in the mucous coat was about three-quarters of an inch in length, and seemed to be common to both openings. A portion of the other coats, several lines in extent, separated the two openings from each other. When the parts were removed *en masse* from the body, water poured into the cavity of the hæmatocele, flowed out freely through the openings in the rectum, and on securing the openings by forceps the whole sac held upwards of a quart. Its capacity during life must have been much greater. The fluid blood taken from the hæmatocele, examined under the microscope, showed blood corpuscles, some perfect, others undergoing various degrees of change; also pus-globules and little black and yellowish masses, some of them assuming a crystalline form. The chief part, however, was made up of undefinable *débris* of blood, fibrin, and pus. It having been a question whether the smooth cavity in the interior of the large clot removed with the blood had contained an ovum, it was examined with care, but neither membrane, vessels, nor structure of any kind were found in it. The case was therefore one of "intra-peritoneal uterine hæmatocele," produced by one of its most common causes—the bleeding from ovarian vessels at the menstrual periods, and one of those forms of the affection in which operative measures would only have hastened the patient's death. In connexion with the phlegmasia dolens, Dr. Madge exhibited at a previous meeting the left iliac artery and vein. The latter contained a firm cast of fibrin, which could not be separated from the vessel without tearing. Its coats were greatly thickened, and were much thicker than the coats of the artery, which was empty and in a healthy condition. The surrounding tissues were infiltrated with inflammatory serum and lymph, some of them being matted together, and a large gland, of a purplish colour, was adhering to the external coat of the vein. A cast of fibrin was also shown taken from the right iliac vein, another from the inferior vena cava, and smaller ones from the lesser vessels. The coats of the vena cava were healthy; those of the right iliac vein thickened. With one exception, the abdominal viscera were in a healthy condition. The spleen was about four times its usual size. In his remarks on the case, Dr. Madge spoke of its peculiar features as contrasted with others already recorded. He also alluded to the

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differential diagnosis of "uterine hæmatocele," and the probability that cases of the latter affection are not unfrequent; but from the comparatively little attention hitherto given to the subject, they have been allowed to run their course unrecognised, and treated for some other complaint; this remark being particularly applicable to those cases cured by absorption. Reference was also made to the disputed questions concerning intra- and extra-peritoneal uterine hæmatocele, and to the subject of diagnosis and treatment as laid down by the leading French authorities. The paper was accompanied by two coloured drawings.

Dr. Tyler Smith observed, that there was no subject within the range of uterine pathology of greater interest and novelty than this of hæmatocele. He considered it to be essentially a form of ovarian or Fallopian menstruation, vicarious in character. The ovaries or Fallopian tubes in these cases produced the menstrual secretion, just as the lungs or stomach did in the case of gastric or pulmonary vicarious menstruation. When the ovaries or Fallopian tubes poured out blood at the menstrual periods, there was no means of escape, as in other forms of vicarious menstruation, and the fluid became accumulated in the recto-vaginal cul-de-sac of the peritoneum. Under these circumstances, the peritoneum threw out lymph with great rapidity, and converted the pouch into a complete sac by covering it over with a membranous exudation. The tumour of the peri-uterine hæmatocele was apparently thus formed, and it frequently increased in size by further accumulations at successive menstrual periods. The common method of escape was by ulceration through the rectum, and the discharge of the altered and retained blood by the bowels. He had seen three cases in which this had occurred, and which had resulted in cure. He should be strongly inclined to puncture the tumour in such cases through the rectum, and to give emmenagogues with a view to the production of healthy menstruation. The case of Dr. Madge was one of the most interesting which had been placed on record, and he could only suggest that a better result might have been obtained if a free opening by the rectum had been established at an early period.

Dr. Madge in reply, mentioned that M. Bernutz had shown the hopelessness of all kinds of treatment in cases of uterine hæmatocele where the Fallopian tubes have become obliterated.

WESTERN MEDICAL AND SURGICAL SOCIETY.

Friday, March 1, 1861.

Mr. L. T. Comberbatch, Vice-President, in the Chair.

Mr. J. Lane exhibited a

CYSTIC TUMOUR,

which he had removed from the neck of a woman. It had made its appearance about eight or ten months previous to coming under notice, when it was found occupying the whole side of the neck from the angle of the jaw to the clavicle. It was first punctured and some pus evacuated; subsequently, the cavity was emptied by a free incision. A purulent discharge afterwards continued for two or three months, when it was removed. The walls were found much thickened; the interior presented a granular and secreting surface.

Mr. C. Hunter then related a case of

FEMORAL HERNIA,

which had been strangulated three times, in a female. The last occasion was on February 16 of this year, when she came under the observation of the author, with all the usual symptoms of strangulated intestine. Vomiting of a greenish fluid; pulse 120; tongue dry, and there was much tenderness of the abdomen, and pain. There was a large femoral hernia of the right side, which was tense without impulse, and tender to the touch. The bowels had been open several times. The taxis, with the pelvis elevated, was tried with the effect of materially diminishing the tumour in size. One grain of opium was ordered to be taken, and ice to be applied with relief to all the symptoms. The following morning the vomiting returned with the pain in the abdomen, rendering an operation imperative. A part of the bowel was found down, congested, and covered with dark spots at various places; some fluid was in the sac, and a doubtful-looking portion of something, most probably condensed omentum. Contrary to expectation she recovered without a bad symptom. The chief interest of the case, Mr. Hunter observed, was, that this was the third time this patient had been under his care with symptoms of strangulated hernia. The first time was in April, 1858, when she was admitted into St. George's Hospital, the author then being House-Surgeon. She had then similar symptoms to those already related. The taxis failed after several attempts; but the application of ice for some days relieved the urgent symptoms, and, in part, diminished the size of the tumour. It was about the size of a walnut when she left the Hospital. In the following September she was again admitted with the same symptoms as before. The tumour was of large size, tense, and without impulse. The bowels were open, as on the other occasions, and there was the same pain in the abdomen. The hot bath reduced the hernia in part. Ice was applied to the tumour, and calomel and opium were given, when later in the day the taxis was employed to the complete reduction of the hernia. So that, as the author remarked, the portion of the bowel previously irreducible was now completely returned. From that time to the present, two years and a-half, she had gone on till the third attack, which was also remarkable for the urgency of the symptoms, the sudden way in which they commenced with vomiting and purging, the reduction of a part of the hernial tumour, the symptoms still continuing, and the rapid recovery of the patient, who it was thought would die, because of the accompanying peritonitis.

MEDICAL NEWS.

Army Assistant-Surgeoncies.—The following are the names of gentlemen who were successful at the late Competitive Examination for Assistant-Surgeoncies in H.M.'s Army. (The names are placed alphabetically.)

Batho, Robert	Hall, A. B.
Belcher, John W.	Ironside, W.
Carleton, William	Poll, Walton N.
Clay, R. H.	Pope, Joseph J.
Clarke, A. F. T.	Lodge, Henry S.
Clinn, William H.	Nedmill, Courtney.
Eaton, B. U.	Staples, Francis P.
Fitzgerald, Jas. A.	Watt, James
Footner, Edward	Welsh, Francis H.
Greig, John	Wilson, W. J.

Apothecaries' Hall.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, March 14:—

Buszard, Frank, Lutterworth, Leicestershire
Caudle, Adolphus William Wisden, Henfield, Sussex
Crutchley, Henry, Market Drayton, Shropshire
Date, William, Cirencester, Gloucestershire
Eddowes, William, Pontesbury, Salop
Mercer, John Thomas, London-road, Leicester
Pyburn, James, Newcastle-upon-Tyne.

The following gentlemen also on the same day passed their First Examination:—

Caudle, Charles Edward, St. Thomas's Hospital
Griffith, William Hughes, St. Bartholomew's Hospital.

APPOINTMENTS.

Harris.—Dr. Francis Harris, Lecturer on Botany and Demonstrator of Pathological Anatomy at St. Bartholomew's Hospital has been appointed Assistant-Physician to the Hospital, *vice* Dr. Baly, deceased.

Collum.—Dr. R. Collum, has been elected Physician to the Metropolitan Convalescent Institution.

Maclean.—The Queen has been graciously pleased to approve of Dr. William Campbell Maclean, of the Madras Medical Establishment, being appointed Professor of Clinical and Military Medicine in the Army Medical School.

DEATHS.

Barber.—March 10, at Colsterworth, Lincolnshire, Clark Barber, Surgeon (in practice prior to 1815) aged 69.

Chalmer.—March 14, at 153, Grove-street, Liverpool, Thomas Chalmer, aged 78.

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CUNNINGHAM.—March 14, at Ormiston, East Lothian, George Cunningham, formerly Assistant-Surgeon R.N.

DANIEL.—March 14, George Daniel, of St. John-street, Manchester, F.R.C.S., M.R.C.S., L.S.A., aged 48.

EGAN.—March 17, at Rockville, Dundrum, Ireland, George William Egan, of 52, York-street, Dublin, A.B. Trin. Coll., Dub.; M.D. St. Andrews; L.R.C.S.I., Dub.; aged 27.

FRIPP.—March 15, Dr. Fripp, of the Mall, Clifton, Bristol, aged 60.

KENNY.—March 14, at Lower Camden-street, Dublin, John Bell Kenny, L.A.H. Dub.; L.M. Dub.; aged 27.

KING.—March 15, at Calne, Wilts, after seven years of severe suffering, George King, formerly of Melksham, Wilts, M.R.C.S., aged 42.

MCDONALD.—March 12, John Cadell McDonald, of No. 3, Forrest-road, Edinburgh, M.D. and M.A. Glasg.; L.R.C.S. Edin.

PYM.—March 18, from paralysis, Sir William Pym, of Upper Harley-street, M.D., K.C.H., formerly Inspector-General in the Army, aged 84.

ROYAL MEDICAL BENEVOLENT COLLEGE, EPSOM.—An unauthorised paragraph having appeared in the public journals relative to the appearance of scarlet fever in the Royal Medical Benevolent College, the Council of the College are happy to announce that the cases, which have all been extremely mild, are doing well, and that only one fresh case has occurred during the past week.

DEATH OF AN ENGLISH MEDICAL GENERAL IN ABYSSINIA.—A correspondent of the *Sémaphore de Marseilles* announces that a Dr. Bell, an English Physician, who had been settled during the last eight years in Abyssinia, and who had become Minister and General-in-Chief to the Emperor Theodore, has been killed in a battle fought at Dezoi-Garad. Theodore, who gained it, ordered the death of 150 prisoners to revenge the loss of his General.

TESTIMONIAL TO M. QUÉTELET.—Every friend of the exact sciences will be pleased to learn that the Belgian Academy of Sciences has determined to strike a medal in commemoration of the services he has rendered to science and the lustre he has conferred on the Academy. The Belgian Government, which before all other European Governments has always shown, by its public acts, the high value it attaches to the progress of science, on learning the intentions of the Academy, announced its intention of participating in the recognition of M. Quételet's valuable services.

THE *Louisville Medical News* closed its existence with the December number. The cause of death will be seen from the following Editorial farewell address. "*To Delinquent Subscribers.*—Gentlemen, your kindness has been our ruin—your favours, our destruction—your smiles, our tears—your approval, our bankruptcy. How rejoiced you must be, when you read this, our epitaph; and, with your Havana curling its grateful clouds above you, thank God that you yet outlive the storm. We envy not the digestion of your next meal; but were it shingle nails and crab cider, it should lie more easily upon your stomach, than the consciousness of your injustice upon your memory. *To Subscribers Not in Arrears.*—Gentlemen, we desire to thank you for your promptitude, and express our deep regret that your numbers had not been greater."

THE DENTAL LICENCE.—Some weeks ago a special meeting of the governors of the Essex and Colchester Hospital was convened to provide for the appointment of a dentist to that institution, when some discussion arose on the points which have caused such unpleasantness in regard to the appointment to the Royal South Hants Infirmary. The meeting was adjourned for the purpose of correctly ascertaining the exact position of the dental profession. At the adjourned meeting, held on Thursday, the 7th inst., the result was made known by the unanimous appointment of Mr. Robert Tweed, a member of the College of Dentists.

ROYAL IRISH ACADEMY.—On Friday evening, the 15th inst., the Rev. Dr. Todd closed his five years' Presidentship of the above Institution, by receiving, at a brilliant *conversazione*, his Excellency the Lord Lieutenant, and a large number of literary and scientific gentlemen. On the following evening the stated General Meeting of the Academy took place, when, on the motion of Lord Talbot de Malahide, seconded by Sir William Rowan Hamilton, Astronomer Royal of Ireland, the Very Rev. Charles Graves, D.D., Dean of the Chapel Royal, was elected President. The Rev. Wm. Reeves, D.D., was elected Secretary in the room of Dean Graves, and John T. Gilbert, Esq., author of the History of Dublin, was chosen Librarian, in the room of the Rev. Dr. Drummond, resigned. The other officers were re-elected. Sir Wm. R. Hamilton, LL.D., and Dr. Apjohn were chosen to fill the vacant places on the Committee of Science; John Anster, LL.D., and D. Florence McCarthy, Esq., to those on the Committee of Polite Literature; and the Rev. J. H. Todd, D.D., was elected to the vacant seat on the Committee of Antiquities. The President, under his hand and seal, appointed the following gentlemen as Vice-Presidents of the Academy:—Sir W. R. Hamilton, Rev. Samuel Butcher, D.D., W. R. Wilde, Esq., and the Rev. James H. Todd, D.D.

A GOOD EXAMPLE OF PROFESSIONAL DISCRETIONARY POWER.—The following anecdote is related of Professor Maunoir who has just died at Geneva. One of his colleagues, now dead and forgotten, too conspicuous for ignorance and still more for inebriety, committed a disgraceful and fatal error in the performance of an operation. Maunoir, who had been called in to endeavour to remedy what had become irreparable, took the involuntary homicide aside and thus addressed him:—"I am very desirous of keeping your secret, but in order that such secrecy may not prove injurious to others, I will do so only on one condition, viz., that I never hear again of your taking into your hand the instruments which you have now so deplorably employed." The lesson was a severe but a just one, and it proved effectual.

POOR-LAW MEDICAL REFORM.—The Committee of the Metropolitan Poor-law Medical Officers, who are now meeting to devise measures for protecting the interests of the Poor-law Medical Officers, have appointed a Sub-Committee to collect facts and prepare a statement, on which to base evidence to be laid before the Poor-law Committee of the House of Commons. The said Sub-Committee will be happy to receive any communications from their Poor-law Medical brethren, detailing any fact within their respective experience, which bears on the agitated question of Poor-law Medical Reform. All letters to be addressed to the Honorary Secretary, Dr. Robert Fowler, 145, Bishopsgate-street Without, E.C., before April 8, proximo.

SCURVY IN THE UNITED STATES ARMY.—This small body of men, of an average strength of less than 14,000, according to the last Official Report, furnished during the five years ending December 31, 1859, 2803 cases of scurvy! On the other hand, at the State Prison of Sing Sing, New York, it appears that among an average force of 1000 convicts, scurvy has occurred in less than fifty instances during the last five years. The difference is still more astounding when it is recollected that none but picked men are enlisted, who are afterwards carefully examined by different Medical Officers, and that most of these are discharged after five years' service; their place being supplied by fresh, healthy recruits. The convicts are of course composed of men of every condition as regards age and health. The editor of the *American Medical Times*, No. IX., refers this disgraceful condition of the army hygiene to the injurious economy in the supplies of fresh vegetables, and in default of these of the well-known anti-scorbutics, determined by the vagaries of an economical Secretary of War, who, nevertheless, had ample means at command for jobberies of political partizans.

SIR B. BRODIE ON GENERAL AND PROFESSIONAL EDUCATION.—In his recent annual address to the Royal Society, as President, Sir B. Brodie thus expresses himself:—"In holding the opinion that much advantage would arise from the study of the physical sciences being regarded as an essential part of a liberal education, I apprehend that it has never entered into the mind of any person who has seriously reflected on the subject, that it should supersede those other studies which form the basis of such an education in this and others of the more highly civilised communities at the present day. One of these studies, indeed, namely, mathematics, is necessary to the physical sciences themselves, there being no one of these sciences to which, under certain circumstances mathematical reasoning may not be usefully applied; whilst one especially, and that the foremost and grandest and most important of the whole, is so entirely founded upon it, that, if this were taken away, there would be very little of the science left. The languages of the ancient nations of Greece and Italy have no such direct relations to the physical sciences as mathematics; but I know no better method than that which

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the study of them affords of training the mind, at an early period of life, to habits of thought and attention, and so of fitting it for other studies afterwards. There is another advantage to be derived from those pursuits which lead us to a knowledge of the Greek and Roman classics. Greek and Roman literature has been the foundation of the best literature of modern Europe; and an acquaintance with it stores the mind of the youthful student with graceful recollections and noble thoughts, which may exercise a wholesome influence over him through all the rest of his life. Further, it may be observed that the study of the ancient languages is an excellent introduction to a knowledge of grammar, and of the use of language generally, and this knowledge is of a kind the importance of which cannot well be over-estimated; not only as it is by means of language that we are enabled to communicate our thoughts to each other, and hand them down to those who are to come after us, but because language is in itself an instrument of thought, without which the reasoning powers which God has given us could be turned only to a very small account."

VITAL STATISTICS OF LONDON.

Week ending Saturday, March 16, 1861.

BIRTHS.

Births of Boys, 996; Girls, 964; Total, 1960.
Average of 10 corresponding weeks, 1851–60, 1787·6.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	633	593	1226
Average of the ten years 1851–60	665·3	632·5	1297·8
Average corrected to increased population..	..	..	1427
Deaths of people above 90	..	..	..
Deaths in 15 General Hospitals	38	25	63

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	376,427	..	2	7	1	11	5	1
North ..	490,396	1	11	7	3	20	3	3
Central ..	393,256	1	4	1	5	19	6	2
East	485,522	1	2	7	..	11	5	3
South ..	616,635	1	1	5	3	19	11	6
Total.. ..	2,362,236	4	20	27	12	80	30	15

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29 686 in.
Mean temperature	42·4
Highest point of thermometer	57·8
Lowest point of thermometer	29 1
Mean dew-point temperature	39·4
General direction of wind	Variable.
Whole amount of rain in the week	0·55 in.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dr. Martin's letter on Starvation is unavoidably delayed until next week.

Dr. Lewis's Case shall appear.

A Member of the Medical Society.—Some extracts from Dr. Leared's excellent oration shall appear next week.

Mr. R. R.—The College of Surgeons does not send lists of its new Fellows or Members to the Medical Journals. Hence the frequent errors and delay, for which the Council is responsible, not the Journals.

Mr. James Bruce writes to obtain information as to the effects of the internal administration of the Phosphates of Lime and Soda in cases where ossification is retarded. He suggests that the Phosphates may be given in gluten or other biscuits, rather than in fermented bread.

M.R.C.S.—If the case were a Surgical case a Member of the College could recover, according to the words of the Act, "reasonable charges for aid, advice and visits, and the cost of any medicines or other Medical or Surgical appliances rendered or supplied by him to his patient." If M.R.C.S. has no Medical qualification he could not recover for attendance or medicine in a Medical case. It would be for judge or jury to decide in a disputed cause whether the case was Medical or Surgical.

B. B.—The "Balsam of Life" is the compound tincture of Benzoin. The original recipe for this remedy as filed in the Office of Rolls contained twenty-eight ingredients.

A. S. S.—Photoglyphy is an invention of Mr. Fox Talbot. A steel plate is covered with gelatine and bichromate of potash, and a photographic impression printed on it. Perchloride of iron is then poured over the plate, and etches through those portions not acted on by the light.

THE LONDON MEDICAL REVIEW.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In reference to the letter I wrote you last week disclaiming all connexion with the *London Medical Review*, I now beg permission to say that I intended no offence to the various contributors to that Journal, amongst whom I number some of my own personal acquaintances. Writing under considerable vexation, I might have used expressions which by implication were annoying to them, but my sole object was to disabuse the minds of my friends (especially my Hospital colleagues) that I had any connexion whatever with the Journal. To injure anyone was farthest from my object. Having also stated in some private letters that the circulation of the *Review* was much exaggerated, I beg to add that having been shown the subscribers' book, the names therein amount to 600, amongst whom are nearly all the leading men of Edinburgh and Glasgow.

As the object of my first letter was to do an act of justice to myself, so I pen this second one to remove any suspicion of injustice done to others. Apologizing for thus troubling you,

I am, &c.
SAMUEL WILKS.

11, St. Thomas-street, Southwark, March 20.

UNIVERSITY DEGREES IN SURGERY.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I beg to call your attention to two expressions in your Leader of Saturday last which I think must have originated in misconception. 1. (page 278) "Surgery has thus for the first time been deliberately assigned an academic rank," referring to the act of the University of Edinburgh, whereas Dublin University had already established the degree of Master of Surgery to be granted to Bachelors of Arts only. 2. "The more restricted 'Doctor of Medicine' of Oxford, Cambridge, and Dublin," etc., whereas Dublin University has for at least twenty years examined its candidates for Medical degrees in "every department of Medicine,"—I can answer for it that I was so examined for the M.B. degree in 1843.

I am, &c.
M.D.

Dublin, March 19.

COMMUNICATIONS have been received from:—

Professor SIMPSON; M. CLAUDE BERNARD; Dr. WEST; Mr. WILDE, Dublin; Dr. ANDERSON, Glasgow; Dr. WILKS; Dr. GRAILY HEWITT; Mr. MACNAMARA, Calcutta; Dr. LEWIS, Carmarthen; Mr. MARRIOTT, Leicester; COUNCIL OF ROYAL MEDICAL BENEVOLENT COLLEGE; REGISTRAR-GENERAL; and Dr. MARTIN.

APPOINTMENTS FOR THE WEEK.

March 23. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

ROYAL INSTITUTION, 3 p.m. Dr. E. Frankland "On Inorganic Chemistry."

25. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

MEDICAL SOCIETY OF LONDON, 8½ p.m. Mr. J. Gay "On Abdominal Bands as Causes of Intestinal Obstruction."

26. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Dr. Robert Lee "On Uterine Polypi;" Mr. Henry Thompson's "Case of Elephantiasis;" Dr. Sansom "On the Action of Chloroform."

27. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

HUNTERIAN SOCIETY, 8 p.m. Dr. Fowler "On Some Cases of Poisoning by Sulphate of Zinc."

28. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.

29. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

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ORIGINAL LECTURES.

CLINICAL LECTURES
ON
THE DISEASES OF WOMEN.

By J. Y. SIMPSON, M.D. F.R.S.E.
Professor of Medicine and Midwifery in the University of Edinburgh.

Lecture XXXVII.

ON AMENORRHŒA.—(*Continued.*)

SEMEIOLOGY OF THE DISEASE.

Gentlemen,—At my last Lecture, as you may remember, I pointed out to you the different morbid conditions of the body generally, and of the sexual system in particular, in connexion with which amenorrhœa was apt to become established. In regard to many of these forms of amenorrhœa, I showed you that the suppression or arrest of the menstrual secretion is only a secondary symptom of other more important diseases, while in other instances it forms the main feature of the case, and is often itself apparently the primary source of other secondary morbid changes in the constitution. Let me direct your attention now more particularly to the symptoms of the affection, and the means by which it is to be recognised and remedied.

SYMPTOMATOLOGY OF THE DISEASE.

There are two great classes of symptoms which we shall have to consider in detail:—First, Those dependent on the condition of the uterine system; and Secondly, Those dependent on affections of different and distant parts, or on changes in the general constitution of the patient. Let me point out to you

I. The Symptoms Dependent on the Condition of the Uterine System.

1. *Diminution or Suppression of the Menstrual Secretion.*—Some patients come telling you that they have at one time "altered" quite regularly, but that latterly the discharge has gradually become less, and sometimes interrupted, or that it has entirely ceased to appear. Others again will tell you that they have never seen any discharge at all, and they are distressed because they are not like other women. Or, instead of appearing regularly every three or four weeks as it ought to do, the period of the recurrence of this monthly secretion has become changed and irregular, and the patient only menstruates now and then,—every two, three, or four months—without her being able to anticipate the exact date of the discharge. In these cases the catamenial flow is often also greatly diminished in quantity; and its actual discharge is very frequently attended with an unusual amount of pain. In other words, patients often suffer from a certain degree of dysmenorrhœa, before the condition of amenorrhœa becomes fully established.

2. *Loss of Reproductive Power.*—In some cases, it is not till the patient has been married some time, and begins to be disappointed at not falling in the family way, that she comes to consult you in regard to her condition. For, although it sometimes happens that a woman may become pregnant without ever having had any distinct menstrual discharge at all, yet the very reverse of this is what we usually meet with in practice; and you will find, very frequently indeed, that a married woman who suffers from amenorrhœa is, at the same time, childless.

3. *Changes in the Mucous Secretion of the Uterus.*—In cases of amenorrhœa, as I have already stated, we not unfrequently find that a kind of vicarious leucorrhœal discharge takes place at each ordinary menstrual period. We meet with cases, further, in which there is a slight leucorrhœal discharge going on almost constantly, and producing more or less discomfort and distress to the patient. But, besides these dynamical or functional disturbances of the reproductive system, there is, in a number of the more obstinate and chronic cases, some

4. *Physical Change in the Uterus.*—Such a change can, of course, only be occasioned by making a local examination of the organ. In the unmarried female, you will, of course, rarely or never have occasion to examine the uterus in cases of amenorrhœa; never, indeed, unless the absence or suppression of the discharge actually threatens to interfere gravely with the health and life of the patient. But in the married female, and in the forms of the disease dependent upon imperfect development, or super-involution of the uterus, it is by a local examination only that you can sometimes determine the true character of the case. You may find the uterus normal in development, size, situation, etc.—nothing organically wrong,—but often this negative information is of the greatest importance in regulating your measures of treatment. In some cases you will reach at once the true nature by a local examination, and by thus detecting the undeveloped, or atrophied state of the organ. In such cases, on introducing the finger into the vagina you will find that the uterus, instead of projecting with a longish neck into the cavity, is only to be felt with difficulty, the os forming a kind of depression in the vaginal vault, surrounded by a thin, soft ring of cervix. The whole organ feels as if it were unusually light and mobile, and on pressing with the fingers of the other hand, above the pubes, the fundus cannot be felt through the abdominal walls. The vaginal portion of the uterus is, however, sometimes well formed, and not to be trusted as an indication of the real size of the organ. To determine its true condition you must introduce a sound into its interior, and this will in most cases enable you to discover that either the os externum or the os internum uteri, or both, are unusually narrow, or that there is some degree of stricture in the canal of the cervix, and more especially, that the length of the cavity of the entire organ is decidedly below the natural standard. The uterus measures only one and a-half or two inches in length, and is correspondingly small in all its dimensions, soft, thin-walled, and very mobile. The whole organ, in short, remains very much in the undeveloped condition in which it was before the period of puberty; and while, in the rest of the system, all the ordinary changes may have taken place, the mammæ having become rounded and prominent, the hair having grown on the pubes, and the whole body having assumed the condition of *embonpoint*, which marks the attainment of womanhood: the uterus has not undergone its usual changes, but has remained small as it is in the girl, and incapable of performing any of the functions of the normally-developed organ. In other cases, again, as I have already explained to you at some length, a uterus which has once been in a perfect state and capable of performing all its functions, with regard to menstruation and reproduction, may undergo such an excessive degree of absorption or involution after delivery, as to be reduced to the condition of an undeveloped uterus. And, besides those changes in size dependent on defective development, or excessive absorption of the uterus, you must bear in mind that it may be found in cases of amenorrhœa to be altogether absent, or in any of those specifically morbid conditions to which I referred at the close of my last Lecture as the occasional causes of a temporary amenorrhœa.

II. Constitutional Symptoms.

Looking only at the general constitutional condition of patients affected with amenorrhœa, we find that they divide themselves into two distinct classes according as there is in the system an excess or defect of blood, or, at least, of some of its chief constituents.

1. *Plethora.*—Handsome and healthy-looking women may sometimes come to consult you, and you wonder at first sight what such blooming subjects can have to complain of. But soon you learn that they are annoyed because they do not menstruate like other females, and they are distressed at never having fallen in the family way. They may have no particular kind of suffering, and present, probably, an appearance of uncommonly good health, in consequence of the suppression of the menses being attended with an excessive accumulation of blood in the body, which lends to the patient an aspect more than usually florid and strong. This very healthy aspect of the patient may be the only striking feature in connexion with her malady; but in most cases there are superadded some of the other symptoms of which I shall have to speak anon. Patients in this plethoric condition constitute by far the smallest division of those who are the subjects of amenorrhœa. Much more frequently we find

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them in impaired health, and presenting a greater or less degree of

2. *Chlorosis or Anæmia.*—Whether we regard chlorosis as the cause or as an effect of amenorrhœa, the two diseases are so frequently seen to be associated together that the presence of the one must always be noted as one of the most common indications of the existence of the other. When pointing out to you in my last lecture the constitutional diseases that might give rise to amenorrhœa, I spoke of chlorosis as possibly leading to suppression of the catamenia in consequence of the poverty or impaired quality of the blood peculiar to that state of the constitution. But the connexion may sometimes be of an altogether different kind. Arrest of the menses may occur, for example, as a result of a sudden chill, of fright, or mental emotion of any kind, or of any other form of nervous shock; and if the disturbance of the generative organs be not speedily quieted and their normal functions completely restored, a general disorder of the whole system may ere long be produced, characterised by the peculiar pallor, by the anæmic bruits in the heart and in the large vessels at the root of the neck, and by the headaches, palpitations, neuralgias, and the whole class of symptoms that are looked upon as distinctive of the chlorotic condition. I have already referred to the circumstance, that during pregnancy and lactation the usual menstrual function of the uterine system is suspended, and I recal it now for the purpose of stating that it is probably only by investigating the manner in which this inaction of the organs is brought about physiologically that we shall ever be ultimately able to ascertain the cause of its pathological production and persistence. But whatever be the nature of the connection between chlorosis and amenorrhœa, you can never suppose that you thoroughly understand any case of chlorosis that comes before you in practice, or that you have ascertained all the data necessary to guide you to its successful treatment, until you have made special inquiry into the state of the generative system. The presence or absence of amenorrhœa in such a case will materially affect your plan of treatment; and it will not unfrequently happen that by the skilful and successful employment of means for restoring the impaired or suspended function of the uterus and ovaries you may succeed in restoring chlorotic patients to the enjoyment of perfect health when you could not cure or even relieve her by any kind of general constitutional treatment. Patients, then, who are the subjects of amenorrhœa are sometimes in a plethoric, but far more frequently in an anæmic condition of body. But both classes of them are liable to a series of secondary diseases, which may be regarded so far as symptomatic of amenorrhœa, and which can then be cured only by means calculated to restore the catamenial flow.

3. *Ulcerations and Vicarious Hæmorrhages.*—It sometimes happens with young girls who have just arrived at puberty that, before the catamenial flow becomes established, a slight discharge of blood takes place on one or more occasions from the mammæ; and the same phenomenon may be observed in cases of amenorrhœa. But, more frequently, when the system attempts to relieve itself of the amount of blood that ought, at the monthly period, to be separated by the uterus, it is through some other channel that the elimination is effected. There is, in many such cases, a determination of blood to the lungs; and sometimes, as a consequence, the patient is troubled with hæmoptysis, which may last for several days; or the stomach is the organ affected, and the patient is relieved by a greater or less degree of hæmatemesis. Occasionally this vicarious hæmorrhage occurs in the form of epistaxis; or, as in the case of the patient, whom we had lately in Hospital, without any uterus, it may give rise to a kind of menstrual dysentery. Again, in patients suffering from amenorrhœa, sores occasionally become established on the legs, or other parts of the body, of a weak or indolent character, never fairly healing up during the intervals between the monthly periods, but becoming more irritable and vascular at those times, and frequently emitting a sanguinolent discharge. That these hæmorrhages, etc., from various organs and parts of the body are dependent on the suspension of the uterine function is shown by their regular monthly recurrence or aggravation, and by the fact that on the re-establishment of the proper catamenial flow these secondary or symptomatic discharges dry up and disappear.

4. *Acne and other Cutaneous Eruptions.*—Besides being liable to become ulcerated, the skin not unfrequently becomes the seat of other morbid changes in women who are suffering from amenorrhœa. Thus we often enough see such patients become subject to attacks of a kind of erythema or erysipelas which constantly recurs, and is obstinate and difficult to cure. Still more frequently have I observed, in obstinate cases of menorrhœa, a severe and distressing form of acne rosacea attacking the face, and which becomes aggravated at each menstrual period. This catamenial acne does not readily yield to any of the applications that are ordinarily successful in removing it, but sometimes disappears at once, as if by magic, on the restoration of the uterine discharge. I have seen more rarely on the face, in other cases of amenorrhœa, a true *impetigo menstrualis.*

5. *Affections of the Nervous System.*—Patients who are suffering from amenorrhœa will almost invariably tell you that they are subject to frequent and severe headaches, which affect chiefly the frontal and temporal regions, and which usually become aggravated at times corresponding to the menstrual period. Even where the disturbance does not amount to absolute pain, they will still complain of an uneasy feeling of weight or heaviness in the head, and of pressure in the orbits. Frequently, moreover, they suffer from intercostal and inframammary pains, and from neuralgiæ in different parts of the body. They sometimes, also, become subject to fits of excitement, which come on most frequently at a menstrual period, and which usually assume a hysterical form, but are at times almost maniacal in character.

6. *Disorder of the Circulation.*—In those cases of amenorrhœa where the suppression of the menstrual secretion occurs in connexion with a condition of general anæmia or chlorosis, I need hardly say, that you will almost always be able to detect the *bruit de diable* in the veins at the root of the neck, and very frequently also a soft murmur at the base of the heart; and you will often find the feebleness of the circulation showing itself also in coldness of the extremities, and, in some cases, even in a certain degree of anasarca above the ankles. But you will find, further, that, even in the plethoric form of the disease, the patients are liable to frequent irregularities in the action of the heart, which becomes excited under the slightest exertion. Even after simply eating a meal, palpitation of the heart may come on; for such cases, you must allow me to add, are very frequently complicated with some

7. *Disorder of the Intestinal Canal.*—The stomach, as you know, readily sympathises with the multiform diseases of the uterine system; and in cases of amenorrhœa, it is not surprising to find that the patient suffers frequently from sickness, and is almost constantly dyspeptic. This irritable state of the stomach is to be borne in mind in the treatment of the case, as it renders the patient intolerant of some of the remedies which are usually most effectual for the cure of the disease, and frequently demands a preliminary line of treatment calculated to restore the intestinal system to a more natural condition. Lastly, patients who are the subjects of amenorrhœa are occasionally liable to

8. *Disturbances of Respiration.*—I have already spoken of the association of amenorrhœa with phthisis, and the circumstance to which I wish now more particularly to refer is the regular periodic occurrence, in persons suffering from amenorrhœa, of a greater or less amount of dyspnœa, at dates corresponding to those at which the monthly discharge should have taken place. It might surprise you to find a symptom of this kind occurring, and occurring so frequently as it does in connexion with suppression of the catamenial flow. But you must remember that Burdach and other German physiologists have maintained the view that menstruation is a kind of vicarious respiration; a view that looked like a wild German speculation, until Andral and Gavarret proved by direct chemical experiment that the theory was not utterly groundless. They showed, for example, that the quantity of carbonic acid gas given off by individuals of the two sexes, was nearly equal before the period of puberty and after the age of child-bearing; whilst females, during the time when the uterus was in functional activity, breathed out a smaller quantity of the gas than males of a corresponding age. During pregnancy, however, when the menstrual flow is suspended, and in cases of amenorrhœa, it was found that a larger quantity of gas was given off by the lungs, than when there was no pregnancy and the uterus was performing its normal functions. These observations may afford us some clue to the explanation of the circumstance, that in some cases of amenorrhœa, chiefly when dependent on imperfect development of the uterus, we find the patient, instead of

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menstruating every month, becoming affected with more or less dyspnœa. I have repeatedly seen this catamenial dyspnœa take on the form of severe menstrual asthma. Some years ago, I saw, with Dr. Pagan, one of the best and most daring lady-huntresses in Scotland, labouring under an attack of this "asthma uterinum," and crying out for chloroform to relieve her; and such cases are by no means uncommon. How this symptom may best be combated, and how the disease itself may be most successfully treated, I shall try to show you in my next Lecture.

ORIGINAL COMMUNICATIONS.

AN EXPERIMENTAL INQUIRY INTO THE VALUE OF INCISION OF THE CILIARY MUSCLE,

IN THE TREATMENT OF CERTAIN DISEASES OF THE EYE AND DISORDERS OF ITS ACCOMMODATION.

By JAMES VOSE SOLOMON, F.R.C.S.
Surgeon to the Birmingham and Midland Eye Institution.

(Continued rom page 223.)

Case 18.—*Asthenopia from Childhood—Right Eye Amaurotic—Left Choroiditis—Intra-ocular Myotomy—Great Improvement.*

Mrs. K., aged 47, has had weak eyes since she was ten years old, when she had the measles. At this time she could not read a verse of a dozen words without magnifying glasses, (asthenopia). She got possession of her grandfather's glasses, No. 7 double convex, and used them "on the sly" to prepare her lessons. At the age of sixteen she obtained spectacles which were a few numbers less powerful than her grandparent's.

She has had one or two attacks of inflammation of the right eye. Eight years ago, she was under the care of a competent Ophthalmic Surgeon, who declared the back of the inner eye to be inflamed. The sight has undergone a progressive impairment, and been attended by a gradual contraction of the field of vision. On the 10th of April, 1860, when I was consulted, it was limited in the right eye to two feet in a lateral direction, and large objects were very indistinct; features could not be made out. This eye was painful; the iris of natural colour; tension of the globe not excessive; pupil sluggish and of natural diameter when at rest. The middle third of the lens was transparent, the remainder covered with black pigment. The choroid afforded a faint silver yellow reflection under ophthalmoscopic light. The optic nerve-entrance and vessels could not be made out in consequence of the condition of the lens. For the last four months, similar symptoms have appeared in the left eye as those which led to the defective sight in the right; all objects are enveloped in mist. To read is impossible. Dark clouds and bright sparks are present before it; the eye feels strained, as if it were pulled by its muscles; all its movements are accompanied by pain. When an attempt is made to use the eyes, shooting pains affect them; even when at rest they feel tired, and tight, as if covered with starch. The pupil is dilated and sluggish, the sclerotic is white and glassy, from atrophy of the subconjunctival areolar tissue.

Ophthalmoscopic Examination.—Anæmic optic discs; dilated retinal artery, its branches more numerous than normal, the vein is dilated and detached from its artery; choroid congested. The patient has been wearing double convex glasses, No. 7 (English).

Treatment.—After ten days' Medical treatment, intra-ocular myotomy was performed on the right eye; it was at the time (April 20) devoid of injection, but painful. On the 24th, the sight of the left was clearer, and on the 27th the field of vision of the right (operated) eye was enlarged from two feet to eight, but objects were still very indistinct. Before the operation the patient had carefully tested the lateral visual field. Operation on left. Intra-ocular myotomy, May 4, 1860; very little aqueous escaped: in seven days the vision was clearer, but the eye was tender on exertion. The patient continued under observation up to July 10, during which period the improvement in her vision (left) was slow but progressive; the improvement commenced at the periphery of the retina, and gradually extended to the centre. At the date named she could read two pages of an octavo volume, thread a needle, and sew a little. Previous to the operations the eyes grew worse daily.

November 23, 1860.—*Right Eye.*—The features of persons are distinguished at three yards, and in bright weather at five. Left eye bears more work than in July, and the vision is clear. The pupil is larger than normal, and the eye has a languid expression.

Case 19.—*Complete Synechia Posterior—Pupillary Occlusion—Sympathetic Disturbance of Fellow-eye—Cure of the latter by Intra-ocular Myotomy.*

Sarah C., aged 60, admitted May 1, presented the following symptoms:—

Left Eye.—Pupil much contracted; lens opaque; iris adherent and bossulated; cornea nebulous; no perception of light for the past eighteen months. Pain of a gritty and tensive character has been present for a year.

Right Eye.—Vision has been weak for a year, and for the last five weeks the patient has not been able to read with it.

Intra-ocular myotomy on the left was followed by a large discharge of aqueous; no vitreous escaped. In three days (May 4) the bossulation of the iris, and pain in the operated eye, were gone. The vision of the left was stated to be nearly as good as it had been a year ago.

At the end of July no relapse had occurred. She has not since presented herself.

Case 20.—*Syphilitic Iritis—Pupil plugged by Lymph—Incision of Ciliary Muscle—Cure.*

A widow, aged 51, applied at the Eye Institution on September 7, 1860. Her face and arms were covered with a copper-coloured eruption. The left eye presented iritis, with a much-contracted and motionless pupil; cornea, hazed; chemosis of the conjunctiva. The eye had been inflamed a fortnight.

Treatment.—Four leeches to the left lid. Five grains of gray powder, with an equivalent of extract of conium to be taken three times a-day, and followed by a draught of turpentine mixture. Belladonna collyrium.

September 14.—No ptyalism; chemosis gone; pupil plugged by a soft, gray lymph; eyeball very tense; the pain in it and the orbit almost unbearable. For the relief of the ocular pressure, and to obviate the choroido-retinal complications which are apt to arise from pupillary occlusion, etc., it became necessary to adopt either an energetic mercurial treatment, iridectomy, or incision of the ciliary muscle. The age of the patient was a sufficient objection to the first plan. Iridectomy was precluded from the circumstance of the patient not being an in-door case. I therefore cut asunder the ciliary muscle, and gave exit to a large quantity of straw-coloured fluid. No vitreous escaped.

18th.—No tension of the globe; the pain is nearly gone; great relief from the operation on the day following its performance; area of the pupil expanded; lymph absorbed; iris bright; gums not sore.

28th.—Pupil more dilated by atropine; globe soft. Reads small pica as well with the left as with the right eye.

February, 1861.—No relapse of inflammation.

DIABETES.

SACCHARINE TREATMENT—DEATH—AUTOPSY.

By T. E. AMYOT, M.R.C.S., L.S.A.

The experiments of Bernard and the numerous interesting observations on the subject of Glycosuria, as the result of disease or injury affecting the middle or posterior brain, lately recorded, have given an increased value to the observance of diabetic cases in which post-mortem examination has been obtained.

Before giving the details of my case, I may perhaps be allowed to mention the nature and position of some of those injuries, traumatic or otherwise, to which the production of excessive or saccharine urine has been attributed, and of which I have found mention in scattered notes from the Medical journals, etc. They are these: Anthrax on occiput—Blow with a stick on back of neck—Fracture of left parietal

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—Contused wound on summit of head, a little to the left of median line—Abscess of cerebellum, communicating with fourth ventricle—Ulceration and softening of brain, including left optic thalamus and tubercula quadrigemina—Softening of floor of fourth ventricle and of the cervical cord—Tumour the size of a nut, in left lobe of cerebellum—Clot encircling the medulla oblongata, and extending into the pons varolii. Many of these cases will be found in a series of valuable papers published in the *Gazette Hebdomadaire* for 1859, *Medical Times and Gazette* for 1854, and one in the *Lancet* for June 2, of the past year. It would be easy to add to their number, but I will only mention the case of a patient of mine, a man of spare and gaunt figure, but of very active and temperate habits, who at intervals suffers the most intense pain in the occipital region, accompanied by excessive secretion of saccharine urine. His health is good at present, and the attacks are less frequent than formerly.

I now proceed to the history of a case which has lately occurred in my practice, and which appears to me interesting in connexion with the subject under consideration:—Mrs. R., aged 46, a farmer's wife, of spare habit and pale complexion, came to me on June 13, 1860. Her father and mother are living, and very aged; one of her sisters died at the age of 49 of diabetes. She states that her present symptoms have existed about two months, but she appears to have been somewhat poorly since Christmas. She now complains of intense thirst, a sense of uneasiness, weight, and pressure about the chest, great weakness, and of passing enormous quantities of water. Catamenia regular; tongue very white; pulse high and feeble.

Her friends inform me that during the last two months (*i. e.* since the commencement of the present symptoms) her mind has wandered a little, and she herself complains of loss of memory and confusion of thought.

I first examined the urine on the 15th. It was pale, nearly clear, no sediment, devoid of urinous smell, faintly acid, sp. gr. 1045, and yielded abundance of sugar with all the tests.

Loaf sugar was ordered to be taken in large quantities; meat, milk, and green vegetables, as diet; and a little tincture of steel three times a-day, by way of medicine.

June 22.—Had felt much better during the first six days of treatment, but not so well during the last two. The pain in the chest continues. Tongue white and creamy; bowels confined; urine as before in its appearance and reaction, but its specific gravity reduced to 1033 (12 degrees). Treatment continued; an aperient given. The quantity of urine passed seems to be from 10½ to 12 pints in the twenty-four hours.

24th.—Much worse since yesterday morning. The extreme dryness of the throat has rendered deglutition very difficult. A full dose of castor-oil had been given in addition to the aperient ordered, but no relief has taken place. She has kept her bed, and since this morning has been nearly comatose. I now find her (6 30 p.m.) very difficult to rouse, with a dry mouth, a pulse of 110, regular, respiration and heart's action natural; skin not very dry on hands and general surface; urine passed much less frequently; no distension of bladder, but slight tenderness in both hypochondriac regions. The secretion passed while I was in the house appeared much as before; but its specific gravity had again fallen to 1029: it was also more acid. Ordered four grains of calomel, and a turpentine enema if necessary.

25th.—Died comatose at half-past two this morning.

Autopsy, Thirty Hours after Death.—Body spare, but not emaciated; colour of surface natural,—no post-mortem darkness or discoloration; rigor mortis apparent in the half-clenched hands.

Chest.—A fair amount of rather singularly amber-coloured fat over sternum and pectorals; lungs crepitant, a little dark, but apparently healthy; heart rather flaccid, not diseased, empty.

Abdomen.—Liver quite healthy; gall-bladder half-full of darkish bile; stomach and intestines healthy, but colon and rectum greatly loaded with hard, knotty fæces; kidneys somewhat flabby, the right one dark and congested; spleen healthy; bladder empty; uterus healthy.

Head.—Vessels of dura mater congested. At the posterior portion and on the inner surface of the membrane, a deposit of sharp bony spiculæ, some of them upwards of half-an inch in length, and disposed in two groops; one of an elongated and irregular figure, the other assuming the form of an oblique cone having a base of half-an inch in diameter, and a sharp firm apex. This deposit extended on the falx to the deepest part of the great commissure, its roughest and sharpest aspect being in contact with the posterior portion of the left hemisphere, immediately above the cerebellum.

Brain.—Healthy and firm, rather full of blood. No effusion or clots in the lateral ventricles or elsewhere. The fourth ventricle, corpora olivaria, origin of par vagum and medulla oblongata generally were carefully examined, but were found firm and natural, and in short, excepting the deposit on the falx and the congestion above-mentioned, there was no sign whatever of disease within the cranium. A part of the liver, the left kidney, the spleen, and part of the brain (the pons varolii and medulla oblongata) were separately subjected to the "yeast" and Trömmers' tests, and each of them showed the presence of sugar in abundance.

Remarks.—I would call attention to the following points in the above case:—Firstly, as connected with the duration, symptoms, and rapid course of the disease it should be observed that the slight mental disturbance together with the thirst and glucosuria commenced only two months before death; that the ill-defined pain and distress about the chest unaccompanied by any symptom of disease in that region was referred to parts supplied by the pneumogastric nerve; and the question arises, how far the irritation of brain which must have been produced by the osseous deposit on the falx was sufficient to account for these symptoms?—The somewhat sudden and comatose termination to the disease accompanied as it was by reduced specific gravity and diminished secretion of urine and probably by a highly carbonized condition of the blood supplied to the nervous centres in consequence, is also noteworthy. Secondly, as connected with the treatment, which was the saccharine plan and nearly that advocated by M. Piorry, the fall in the specific gravity of the urine was remarkable.

I should add, in conclusion, that although the occurrence of bone patches on the falx is by no means rare, and their pathological importance is either *nil* or unknown, yet the existence of a sharp, conical mass of spiculæ, elevated a good quarter of an inch from the surface of the membrane, must, in such a situation, have been productive of vast irritation of some kind.

In Jones and Sieveking's "Pathological Anatomy" there is a woodcut representing a deposit somewhat similar to the one I have described, but apparently much less rough, which was taken from a man, aged 28, who had suffered from severe headaches from boyhood, and died paralytic. If any notes of the case exist in the St. Bartholomew's books, it would be highly interesting to learn the state of the urine.

Diss, Norfolk.

ARMY MEDICAL REPORTS.

No. XL.

COMPLETE TRANSFIXION OF THE ABDOMEN BY A BAYONET—RECOVERY.

By R. COOPER TODD,
Surgeon to the 99th Regiment.

The following recovery from a wound caused by a bayonet, which passed through the abdomen of a soldier in my Regiment during the last China war, may prove interesting to some of your readers:—

Private John C., aged 25, a healthy and vigorous man, joined the 99th Regiment, as a volunteer for the China war on January 17, 1860. He had served with the 53rd Foot during the Indian mutiny. He generally enjoyed good health, and has escaped without a wound. On August 10 following he landed at Peh Tang with the 99th Regiment, and was appointed to the Provost Marshal's staff, as one of the camp police. In this capacity he accompanied his Regiment and Division on the march to Tien-tsin until September 3, where he was unfortunately wounded by his own bayonet.

On the morning of September 3, the Division had marched for upwards of seven hours through a barren and dusty country. The morning sun was very powerful, and the march distressing

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to the soldier. The number of natives who flocked into camp with eggs, fowls, vegetables, and other saleables were so numerous, that C——'s police duties became more onerous after his long march than when upon the road. To facilitate his work he was, therefore, allowed to get a pony from the Commissariat Department. This brute proved to be refractory and unwilling to go any way but the one most agreeable to himself. In the struggle with his rider he got among the heel-ropes of the other animals and fell. C—— was thrown. His bayonet fell out of its scabbard, and the unfortunate soldier fell on the top of the weapon, which passed directly through the abdomen. It entered the back, about two inches to the left of the last dorsal vetebra, and reappeared about two and a-half inches to the left, and below the umbilicus.

The weapon passed first through a fold in the man's tunic, and thus perforated the back of this garment in three places. It then entered the band of his trowsers, the back of his shirt, the posterior and anterior walls of the abdomen, the front of the shirt, and reappeared over the band of the front of his trowsers. The point protruded about two inches anteriorly. There were three holes posteriorly in the tunic, one in the trowsers, and two, one posterior and the other anterior, in the shirt, and two of course in the abdominal parietes.

A Medical officer belonging to the Military Train, Dr Sainter happened to be present, and the bayonet was immediately withdrawn. In a very few minutes, certainly not more than three or four, I saw him. He was then perfectly calm and collected and did not complain of pain. He expressed his belief in the hopelessness of his case, but at the same time exhibited an amount of deliberate courage highly inspiriting to his Medical attendant. Pieces of wet lint were applied to each wound and a single strip of a bandage tied round the abdomen to keep the lint in its place. He was then removed to the Hospital tent, 99th Regiment, and sixty drops of laudanum in some weak brandy-and-water administered, and repeated in about four hours afterwards. On the following morning he complained of sickness of stomach, and inability to micturate. A little arrowroot and brandy administered was instantly vomited. The laudanum was again given, and perfect rest, as far as possible enjoined. This of course, on the line of march was impracticable, as the patient had to be carried in his dhooly with the army. It, however, so happened that very heavy rains fell during all that early morning, so that the division instead of moving about 3.30 a.m., did not get away until after 11 a.m. This fortunately gave C—— seven hours' more rest than he otherwise would have had. However, he had a very fatiguing day's march. He was carried from 11 a.m. until after 5 p.m., when we again halted for the night. He bore the journey well, arrowroot and brandy-and-water had been administered during the march, and the irritability of the stomach was greatly allayed. The bladder, however, had not acted. He did not feel any desire to make water, but the bladder presented all the evidences of being full. A catheter was passed and a large quantity of urine evacuated, which, however, appeared healthy and totally free from traces of blood. He had no pain. His tongue was normal, and pulse about 62. The bowels had not acted since the accident.

On the next morning the division again advanced. We left at four o'clock. C——, previous to leaving, got a cup of arrowroot and brandy. About nine a.m. we halted (in consequence of some want of arrangements relative to our encamping ground), on the road leading to Tien-tsin. The sun was extremely powerful, and C—— suffered much from the heat. Even the healthy officers and men suffered from the heat during that tedious halt, and during that time it was considered advisable to let C—— have more than one draught of brandy-and-water. It was two o'clock before the tents were pitched and the patient made comfortable. Here ice was plentiful, and grapes and eggs were in abundance. Iced water was applied to the abdomen, and the patient was allowed to use grapes and the beat-up yolk of an egg. Here the bladder recovered its tone, but the bowels did not act. A lukewarm water enema was administered and a little feculent matter washed away. Still the bowels remained confined. The next day was a day of rest. A tablespoonful of castor-oil was given in the beat-up yolk of an egg, and in a few hours the bowels were very favourably acted upon twice. Neither evacuation caused pain, or presented any trace of blood. From that time he gradually recovered without an untoward symptom.

On September 8 (the accident, it will be remembered, occurred on the 3rd), my regiment advanced through Tien-tsin towards Pekin. It became, therefore, necessary to transfer the patient to the care of Dr. Little, Royal Marines, which corps occupied the adjacent lines. When the Marines were ordered forward, he was transferred to the General Hospital, Tient-sin. I saw him on the 28th of October on my return to Pekin. A small scab, which contained some pus, covered the hole where the bayonet had entered. The wound formed by the exit of the bayonet was quite well, leaving a triangular cicatrix. He was pale, but in good spirits. His digestion was good; his tongue clean; pulse 62; his bladder acted perfectly.

He complained to me of "a drag in his belly" when he straightened himself up, and a pain across the loin when he stooped. He also stated that he felt this "drag in the belly" when the bowels were costive, but that "generally his bowels were rather free." In other respects he was quite well.

In this case it must be clear to everybody that the bayonet passed through the abdomen without injuring the intestines or any other important part. If the ureter or intestine had been injured, some traces of blood would have existed in the urine or motions. If any vessel had been wounded, syncope would probably have occurred, or at least some evidence of loss of blood. Such was not the case. The bayonet, in my opinion, injured nothing excepting the peritoneum and the parietes of the abdomen. The point of a bayonet is not particularly sharp; it is rather rounded, and inclined backwards. The intestines were probably empty. With the exception of a cup of tea, and perhaps some grapes and a bit of biscuit, C——, in all probability, had eaten nothing since six o'clock on the previous evening. The resistance to the bayonet by the intestines was therefore slight. They slipped away from before its point, and thus escaped perforation.

In like cases, I have no doubt but that many Medical Officers would have been inclined to try and "prevent peritonitis" by "active treatment," as it is called. The patient would have been bled and put under the influence of mercury. This case, to my mind, proves that such treatment was not necessary, and I believe would have proved injurious, because it would have weakened the patient, and thus impaired that indomitable courage to which I believe he in a great measure owes his wonderful recovery.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

CONDUCTED BY

JONATHAN HUTCHINSON,

Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital,

AND BY

J. HUGHLINGS JACKSON, M.D.

METROPOLITAN FREE HOSPITAL.

CASE OF PERFORATION OF THE LARYNX, AND FORMATION OF A CIRCUMSCRIBED PNEUMATOCELE IN THE NECK.

(Under the care of Mr. HUTCHINSON.)

The following case exemplifies an extremely rare lesion, one which is scarcely mentioned in books, and of which we do not recollect to have seen any other example:—

William M., aged 23, a pale, phthisical-looking man, was admitted on January 2, on account of a swelling in front of the neck, just over the lower part of the larynx and front ring of the trachea. The swelling was the size of a pigeon's egg, and was evenly rounded. It distinctly fluctuated under the finger, and differed only from an abscess on the point of bursting, in that its centre was not conical, and that the skin, although thin, was not in the least inflamed. On compressing the tumour, it was found that it could be emptied of its contents with the greatest ease, but that it refilled when the man coughed. Its borders were somewhat inflamed, there being a margin of circumscribing induration about its base. On percussing the tumour while the man held his breath, it

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was found to be tympanitic. There could, under these circumstances, be no doubt that a communication with the larynx, through the crico-thyroid space, existed. The following facts as to the history of the case were obtained:—

The man stated that he had begun to be ill about three months ago, and "enlarged kernels" under his chin and about his neck were his first symptoms. After this he had cough, and several times spat a little blood. A month later he became hoarse, and had pain in swallowing. His cough was violent, and at times paroxysmal. He had noticed the swelling for about three weeks; at first it was small, and had gradually increased in size. There had never been any indication of diffused emphysema in the neck. He had latterly had much difficulty in swallowing, and had lost flesh greatly. The swelling of the glands at the time of his admission had wholly disappeared. His aspect was decidedly that of phthisis.

He was ordered to take cod-liver-oil and quinine, and the pneumatocele having been emptied of its contained air, was carefully supported by compresses and plaster. After the application of these he could speak much more easily, and swallow better. On his second attendance, a week later, the compresses being well in place, were not removed. His cough and constitutional symptoms were no better, and there appeared every reason to believe that he was rapidly advancing in phthisis. He did not attend again.

On the whole, the evidence seems decidedly to tend to the belief that the case was one of laryngeal ulceration, probably of a tubercular kind. It is quite possible that the enlargement of the lymphatic glands which he had first noticed, was secondary on tuberculous disease in the mucous membrane, since it had been but slight, and had afterwards wholly disappeared.

UNIVERSITY COLLEGE HOSPITAL.

LARGE MALIGNANT TUMOUR DEVELOPED IN THE SHEATH OF THE SARTORIUS MUSCLE—REMOVAL.

(Under the care of Mr. ERICHSEN.)

On Wednesday, March 13, the patient, a man aged 38, the subject of this case, was brought into the operating theatre for the removal of a large tumour, situated on the front and inner side of the thigh about midway. It was about the size of an infant's head, and at one point was ulcerated, and there was a serous and bloody discharge. The man said that ten years ago, after some unusual exertion, he felt something "give way" in his thigh in the position of the tumour. Two years ago he found a lump which at first increased gradually, but latterly very rapidly. In his remarks to the students, prior to operation, Mr. Erichsen said that the first point to be considered before interfering with such a tumour, was the nature of its deep connexions. The femoral artery could be traced to the tumour, and the popliteal and tibials could be felt pulsating. There was probably no implication of the artery, and as there was no œdema of the foot, he did not think the vein was affected. The tumour was mobile, and, therefore, not adherent to bone. If left it would probably destroy life, and, therefore, it was proper to interfere. It was, however, difficult to be quite sure that the disease did not infiltrate the parts surrounding the sheaths of the femoral vessels.

Mr. Erichsen made an elliptical incision round the tumour, and then dissected it away, dividing the sartorius muscle above and below, to which it was attached. He then found that it was encapsuled and came away readily, and although this necessitated the exposure of the sheath of the femoral vessels for several inches, neither the artery nor the veins were implicated, and there was no hæmorrhage. The tumour appeared to be of an encephaloid character, which opinion was confirmed afterwards by the microscope.

One point of special interest was that it was developed in the sheath of the sartorius muscle. Mr. Erichsen had divided this muscle above and below in removing the mass. It was not the first time, Mr. Erichsen remarked, that he had seen such a case. Seven or eight years ago he removed a tumour nearly as large, but of a cystic nature, from the thigh of a lad. It was developed in the short adductor muscle. In this case the disease extended deeply between the trochanters, and it was impossible to pursue it by the knife; potass fusa was applied, and the case did very well. Mr. Erichsen also alluded to the fact that a great part of the present operation was done by the finger and the handle of the scalpel.

March 20.—The man has done well, and has not had a bad symptom. The wound is fast closing. Mr. Erichsen again remarked on the fact of this tumour having followed an injury—a fact to which, he believed, too much attention could not be paid, as it showed its local character.

GUY'S HOSPITAL.

EPITHELIAL CANCER INVOLVING THE WHOLE OF THE LOWER LIP—EXCISION—FORMATION OF A NEW LIP.

(Under the care of Mr. HILTON.)

[Reported by Mr. BENSON.]

John B., a brewer, aged 44, was admitted February 13, 1861. He said that until the disease for which he was admitted he had always had good health. Two years and three months before admission he first noticed a small pimple over the right angle of the lower lip, which a few days after he first observed it, broke. It contained pus, and gradually increased in size, and became very painful and hard. Two months ago, the tumour being then half the size it was when in Guy's, he consulted a Surgeon about it, who advised that it should be removed; but not liking this mode of treatment, he applied to a quack doctor, who stuffed it up with some ointment. He continued under this treatment for a month, with no relief, the tumour gradually increasing.

There was a very hard, diffused tumour extending from the right angle of the mouth to within one-third of an inch of the left angle, and downwards nearly to the base of the symphysis. The mucous surface was ulcerated. He had been a smoker, but the disease commenced on the side opposite to that on which he placed his pipe.

On February 18, Mr. Hilton removed the mass. An incision was made in a semicircular direction from the right angle of the mouth to within a quarter of an inch of the left angle, by which the whole disease was included. The mucous membrane was left intact until the last stage of the operation, when the vessels were all tied and the bleeding had ceased, so that no blood passed into the mouth, which is of course important when the patient, as in this case, was under the influence of chloroform. The next step was to form a new lip. Mr. Hilton made an incision in the middle line from the first incision to a point midway between the symphysis and the os hyoïdes. From this point he carried an incision for an inch and a-half on each side: and then dissecting up the flaps and separating them from the lower jaw as far as the mental foramina, he united them in the middle line so as to form a new lip. The space left at the site of the horizontal incision was left to granulate.

February 22.—The two flaps united firmly.

March 26.—Wound all but healed.

POPLITEAL ANEURISM—TREATMENT BY COMPRESSION—LIGATURE OF THE FEMORAL—RECOVERY.

(Under the care of Mr. COCK.)

[Reported by Mr. MARTIN.]

James C., aged 36, a fine, powerful looking man, an engine-driver, was admitted into Naaman Ward, under the care of Mr. Cock, on the 9th of January, for a popliteal aneurism. His history of it is this:—On the 17th December last he jumped off an engine on to the ground when going at the rate of about fifteen miles an hour (a thing he very commonly did); this time, unfortunately, instead of pitching on his toes and thus breaking the shock, all his weight fell on his heels; he instantaneously felt a very severe pain run up his leg and lower part of the thigh, so great was it that his first impression was that he had broken "the small bone of his leg." He rested for a few hours, when his leg and foot began to swell and the pain subsided. The next day he resumed his work and so continued at it for the three or four following days, until he was suffering so acutely as to oblige him to give up work. He then, for the first time, noticed a small swelling at the bend of the knee, which, when he felt it, "beat like his pulse." He became alarmed

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and went off to a Surgeon, who explained to him the danger of his case and advised him to go to the Hospital. The tumour on his admission was of the size of a large walnut, soft, and had a remarkably strong pulsation.

Mr. Cock resolved to give him a chance by compression, remarking, however, that his expectations were far from sanguine as to the result, on account of the unusual power of his arteries. On the 11th treatment by pressure was begun. First of all by a weight over the femoral artery where it passes over the pubes, and then relieving him by a tourniquet below, and so on for four days and nights without intermission, at the same time applying ice to the tumour. At the end of this time it was impossible to continue this treatment, as the weight and tourniquet had caused abrasion of the skin. The tumour at this time had become very much harder, and gave every appearance of a clot having formed. Mr. Cock, therefore, determined to try pressure again as soon as the wounds were healed. After the lapse of three days the weights were again tried and kept on for forty-eight hours, but they were obliged to be taken off, as they caused him excruciating pain and consequent exhaustion. He begged that they should not be again tried, and wished to have the artery tied.

Mr. Cock on February 5 ligatured the femoral artery. He did remarkably well without a bad symptom. The ligature came away on the twenty-third day after the operation. There was very little swelling of the limb, which was due, no doubt, to the collateral circulation having been previouly so well established by the compression. The wound healed very rapidly, and the man went out well on March 13.

ST. BARTHOLOMEW'S HOSPITAL.

ACUTE MYELITIS AND PARAPLEGIA.

(Under the care of Dr. BURROWS.)

John E., a porter, aged 55, whose occupation was heavy work, was admitted January 16, 1861, for paraplegia. The history of the case obtained was that up to the evening of January 14 he was, he considered, in good health, with the exception of a "cold." When walking home after his work he began to feel weakness in his knees, and also a numbness extending upwards from his feet. By the time he got home he was obliged to walk with his back bent forward and grasping his thighs just above the knee with his hands. While undressing to get into bed complete paralysis ensued. He then also lost power over his bladder, and the urine dribbled away. For some time he had had difficulty in micturition—he had been a long time in passing it—and the stream was small, but he had passed his water as well as usual on the 14th. He did not remember to have had any injury to the spine.

On admission it was noted that he was a fairly nourished man; his complexion was sallow. The capillaries of his cheeks injected, but his face was very pale and anxious. The conjunctivæ were suffused and injected; the pupils slightly contracted and sluggish. He laid with his eyes partially closed. He was constantly grinding his teeth. His respiration was laboured and accompanied by moaning; the respiration blowing with some inflation of the cheeks. He had also occasional cough. His tongue was moist and furred on the dorsum. Pulse 120, of fair volume, and rather sharp beat. Urine free; specific gravity 1016. It contained no albumen and no excess of phosphates. He was not able to pass any urine. It was drawn off by the catheter. There was no stricture and no prostatic enlargement. Bowels very costive. The lower extremities, as regards motion, were completely paralysed. There was no involuntary action of the muscles. The sensation of these parts was impaired, but he was conscious of firm pressure everywhere. There was no impairment of action in the upper extremities. No prominence in any part of the spinal column was detected, and no pain was elicited on percussion. An enema was given and aperients. He was cupped to six ounces. A blister was applied to the back of the neck. Wine six ounces. 1.30.—The paralysis now appeared to have extended upwards; sensations being lost nearly as high as the nipples, and he now seemed to be unable to move the hands, which dropped when raised. They still retained sensation. His pulse was 96; compressible. He seemed half comatose. 6 p.m.—He was more sensible, and talked rationally. The face had lost its extreme pallor. The upper and lower extremities were cold, and his power to grasp by the hands was much impaired. Sensation was found to be impaired to within an inch below the nipple. Pulse 120; very small and compressible. His bowels were freely open. The motions were passed involuntarily.

January 17.—He has had a very bad night and talked very incoherently. The bowels were moved, the motions still passing involuntarily. The urine was abundant, and was still removed by the catheter. At the time of this note he was laid on his back asleep. The eyelids were half closed, the conjunctivæ suffused, and the pupils contracted; the respiration was deep and low, unaccompanied by stertor. When roused he answered rationally, in low and indistinct tones, very briefly and soon subsided again into a semi-conscious state. He said that he had no pain in his head. On raising his arms they fell helplessly, and he did not attempt to raise them, but on pinching them his countenance indicated that he felt pain. His skin was warm and dry; pulse 118, easily compressed, and rather sharp in the beat. His tongue was coated by a thick fur. There was no involuntary movement of the limbs, and no reflex movements were excited by pinching. He took wine and beef-tea 2 p.m.—He was now more unconscious, and there was greater difficulty in rousing him. He had much difficulty in swallowing fluids; they appeared to excite the sensation of choking. His respiration was laboured, the expiration blowing, and he had hiccough. His head was shaved, a blister applied to the scalp, and mercurial ointment was rubbed into the axillæ. Enemata of beef-tea and brandy were given every six hours.

18th. 11·45 a.m.—He was now lying supine and quite unconscious, and had been in this state all night. His face was flushed, and his skin dry and hot. There was slight paralysis of the face on the left side; pulse 140, sharp in beat, compressible. Respiration was slow and deep, 28 per minute, and accompanied by moaning. There was much tenacious mucus at the fauces, which he was quite unable to expectorate. His lips were dry, tongue coated with a white fur, and dry at tips and edges. His face was flushed, the conjunctivæ injected, and the eyes closed. The pupils were partially contracted, and did not act perceptibly by light. He had lost all power of articulation, and was not able to swallow anything, the least quantity of fluid exciting the sensation of choking. He did not show any signs of sensation anywhere except on the face, when, on being touched, the corrugator supercilii muscle contracted. The blister had risen well. The urine and fæces were passed involuntarily. He died at 2 p.m.

Autopsy.—There was considerable minute injections of the smaller vessels of the surface of the brain. On dissection the brain substance was found to be pretty firm, and the white substance stained of a yellow colour, with numerous red spots. The grey matter was very pale. There was very little fluid in the lateral ventricles. The sheath of the cord contained a considerable amount of lightly opalescent fluid, about two ounces. About the level of the upper dorsal vertebræ the cord was found to be markedly softened, and of a light yellow colour. Below this point, also, it was softer than natural. There was no effusion of blood into the sheath. The lungs were congested, and there were firm old pleuritic adhesions. The heart was small, but was otherwise normal. The left kidney was congested and much enlarged. The capsule was readily stripped off, leaving the surface smooth. Here and there were small white pearly deposits, like carcinoma. In the right kidney were a few similar spots. The prostate gland was considerably enlarged, indurated, and the seat of a deposit like hard carcinoma in its external character.

Remarks.—Dr. Burrows remarked that the extreme rarity of acute inflammation of the substance of the spinal cord and the comparative unfrequency of examinations after death of this portion of the nervous system renders this case both interesting and instructive. If the man's statement was to be relied upon, he was in his usual health to within forty-eight hours of his admission into the Hospital, and yet in that interval of time such serious mischief had taken place in the spinal cord that the patient had become completely paraplegic as far as the lower half of the body. The loss of muscular power over the lower extremities, of the bladder and rectum, the impairment of sensation in the same parts,

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together with the absence of symptoms of spinal irritation, and the inability to rouse any reflex movements, would seem to indicate the existence of disorganisation of the substance of the cord, even at the time of his admission. The morbid action appears to have been so firmly established that its progress seems to have been almost uninfluenced by the remedies employed, but the changes of structure discovered after death will probably be considered to have justified the employment of these remedies. There is every reason to suppose that the disease was excited by the direct action of cold upon the surface of the body, and the history of other similar cases leads to the conclusion that acute myelitis, or inflammation of the spinal cord and its membranes, is usually induced by exposure to a low temperature.

THE LEICESTER INFIRMARY.

IDIOPATHIC TETANUS TREATED BY BELLADONNA INTERNALLY, AND BY SUBCUTANEOUS INJECTION OF ATROPINE—DEATH.

(Under the care of Dr. CRANE.)

[Reported by Mr. MARRIOTT.]

A man, aged 46, was admitted at 1 p.m. on October 11, 1860. His occupation was that of a wool-comber, in which he was greatly exposed to wet and cold, in washing and cleaning the wool. A week ago he felt stiffness in the jaws and a slight pain at the epigastrium, though not enough to make him discontinue work. On Monday last he went to work as usual, but was obliged to give it up, owing to the pain in his neck, jaws, and epigastrium. He sent for a Surgeon, and on the next day he took an ounce of salts, which opened his bowels once. He gradually grew worse, and his bowels became constipated. His home was destitute of all comfort, the room in which he lay had no fire in it, and the bed-clothing was very insufficient. He had been a tolerably healthy man, and had no wound or sore of any sort on any part of his body. It was ascertained after his death, from a fellow-workman of his, that about six or seven weeks ago he had a slight "gathering" on one of his big toes, but on examining the toe there was not the slightest appearance of anything abnormal.

When admitted his jaws were closed to within a quarter-of-an-inch. He could talk moderately distinctly, but with some difficulty. His belly was hard, and somewhat full. The trunk was slightly arched backwards, and the muscles on either side of the spine were rigid. Those of the arms and legs were unaffected. The eyebrows and forehead were corrugated, and the corners of the mouth were slightly drawn down. He said that his tongue felt as if it were swollen. The sterno-mastoides and the muscles of the neck generally were distinctly contracted. His skin was bathed with perspiration, and his countenance pallid. Pulse 90. Respiration hurried and difficult; clonic spasms came on about every fifteen or twenty minutes, giving him great pain, and causing great difficulty in deglutition. He was placed in a warm bath, and derived great comfort from it. He was then put fully under the influence of chloroform, when his belly became flaccid, and his mouth opened full an inch or more. The tongue was not at all larger than natural. An injection of colocynth was given, but it produced no action of the bowels. He was directed to take half-a-grain of extract of belladonna every four hours. A belladonna plaster was applied to the whole length of the spine, and a blister to the epigastrium. At 6 p.m. he was about the same. Pulse 92. Pupils natural. He was also ordered to take immediately one drop of croton oil, and at 10 p.m., as there was no action of the bowels, the croton oil was repeated. 12 p.m.—His bowels were freely open. He had had a little sleep.

October 12 (9 a.m.)—Pupils natural, bowels open four or five times. The spasms came on oftener, but were less painful. His mouth was slightly more closed. Pulse 92. He was ordered to take the extract of belladonna every three hours. The blister had answered well. 2 p.m.—Pulse 96. He talked with much more difficulty. The angles of his mouth were drawn down to a much greater extent. One sixteenth of a grain of atropine was injected in two places opposite one another, on a level with the fifth dorsal vertebræ, about one inch from the spinous process. His pupils acted well with the light from the window. 5 p.m.—Pulse 136, small, feeble. His jaws were completely closed, and his face was expressive of great suffering. He had frequent chronic spasms affecting both arms and legs, and could not articulate more than a monosyllable occasionally, and that with greatest difficulty. His respirations were very frequent. The pupils were now dilated widely, and did not act by the light from the window (dusk). There was very slight contraction when a candle was brought close to the eyes. Both upper and lower lids were strongly closed, so that it was difficult to open the eyes. He was ordered to take wine and brandy freely. He took them with some risk of choking, as his power of swallowing was very imperfect. 7·30 p.m.—He laid quietly, if spoken to he roused for a moment, rambled, and soon relapsed. He had distinct twitchings of both arms. Belladonna was ordered to be discontinued. 11 p.m.—He was still delirious, but answered questions and articulated better. He opened his mouth one-third of an inch between the teeth. There was no twitching of the arms, but he often moved his hands about as if going to grasp something. He asked for water. Pulse 144. Pupils not greatly dilated, it was uncertain whether they acted with light or not, owing to the great tendency to close the lids tightly. He died on October 13, at 4 a.m.

Autopsy, Thirty Hours after Death.—Body arched backwards; cadaveric rigidity strongly marked, especially in the lower extremities. The spinal canal was laid open in its whole length. There were small masses of fatty tissue on the external surface of the dura mater, but no increased vascularity of the pia mater, or of the cord itself. The latter was firm. Brain.—The dura mater was normal; the vessels of the pia mater were turgid; the convolutions were well marked; and there was no flattening. Section of the brain-substance showed a large number of red points, which bled freely. The lateral ventricles contained a little clear fluid. The cerebellum was healthy. The solar plexus and the semi-lunar ganglia were dissected out, and appeared perfectly natural. A subsequent examination by the microscope of portions of the brain, spinal cord, and semi-lunar ganglia, revealed nothing abnormal in their structure. The thoracic and abdominal viscera were all examined, and appeared healthy, with the exception of two or three small deposits of tubercle at the apex of the left lung.

CARMARTHENSHIRE INFIRMARY.

CARCINOMATOUS STRICTURE OF THE ŒSOPHAGUS — ENORMOUS PASSIVE DISTENTION OF THE STOMACH—DEATH—AUTOPSY.

(Communicated, with Remarks, by Dr. LEWIS, Physician to the Infirmary.)

James C., aged 47, was admitted into the Carmarthenshire Infirmary, November 5, 1860. Last April he first began to be conscious of any difficulty in the food passing down into the stomach. One Saturday night in the August following, he had the misfortune to have a piece of beef fixed in the gullet, which he could neither "pass upward nor downward," and living at a distance from any Surgeon, he remained unrelieved until the following Monday afternoon, a period of about forty hours. During this interval he could not swallow either liquid or solid. The piece of beef was removed by means of a probang. The passage remained tender for about a week, and afterwards he could swallow tolerably well again for a time. From this period he dates the commencement of pain in the left upper dorsal region, scapular region, and down the left arm. These pains soon became excessively severe, and deprived him of sleep at night. Last autumn, on two different occasion, he spat up a mouthful of blood.

State on Admission.—He is of moderate stoutness, not looking sunken or wasted. He complains of great and almost constant pain on the left side of the spine, near the second and third dorsal vertebræ, extending along the left side of the chest and down the left arm. His pain is somewhat relieved by extending the left arm and keeping it in that position. He has a loose cough, and expectorates four or five ounces of muco-pus in the day. Sonorous and sibilant *râles* only are heard in the chest, front and back. No marked dullness was discovered anywhere. Heart's sounds and action normal. He did not immediately on his admission direct special attention to the difficulty of swallowing; the cough, expectoration, and left scapular pain absorbing his attention.

About November 20 his case was discovered to be stricture

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of the œsophagus. On attempting to pass a small œsophageal bougie, it was stopped in the passage nine inches from the teeth. Nos. 10 and 12 urethral bougies were tried without success for several days, but ultimately No. 10 passed. The introduction of this into the strictured part was repeated about every third day, with some relief to the patient; it caused no pain, but now and then a little blood was brought away at the end of the instrument. The condition of the patient remained much the same during the following two months, except that he steadily wasted and lost strength. No larger instrument than No. 10 urethral bougie could be passed until about ten days before his death, when the House-Surgeon succeeded in passing a small-size œsophageal bougie.

The severe pain about the left scapula and arm was relieved by the friction and opiate liniment. His bowels were constantly constipated, and were relieved by the occasional use of castor-oil and enemata. He was supplied with as much food as he could take, which consisted of beef-tea, and eggs with bread, and also wine and brandy. Nothing gave him so much comfort as smoking—an indulgence he was allowed contrary to the rules of the "House." He was in the habit of tickling his fauces with a feather when he wished to empty the pouch-like dilatation of the gullet immediately above the stricture. In passing the instrument into the stricture it was made out to be of an irregular surface, and that it extended some distance down the œsophageal tube. About a week before his death he could get down more food than he had been accustomed to do. His emaciation and weakness were at this time extreme, and he seemed to suffer from partial paralysis of the left side of the body. No œdema, neither bed-sores, occurred.

He died on February 6, 1861.

Autopsy.—Body much emaciated; skin universally sallow; no œdema; no bed-sore. Chest.—Right lung.—Extensively adherent to the chest-wall. At the base of the lower lobe the borders presented very large emphysematous dilatations of the air-cells. In different parts of the entire lung were carcinomatous deposits, varying in size from a pea to a nutmeg. The pleura covering the deposits was puckered and somewhat flattened. The white colour of the deposit could be seen through it. On section the deposits looked whiter than tubercle. The apex of the lung was quite free from any deposit. Left Lung.—Entirely adherent posteriorly to the chest wall. This lung was more collapsed than the right. No emphysema observed. The same amount of carcinomatous deposit was found as in the right lung, and presenting similar conditions. The apex was free from any deposit. Heart.—Rather small, but healthy. Posterior Mediastinum.—The contents of this region were more bulky than usual, and closely matted together. The entire mass was cut across at the level of the cricoid cartilage, and removed from the body together with the stomach. The upper part of the œsophagus was filled with a grey, pultaceous substance in a state of fermentation. The œsophagus, trachea, and great blood-vessels having been removed from the body, were afterwards examined more carefully and dissected. The œsophagus was laid open through its whole length. This brought into view a large ulcerated surface, covered with excrescences of a dirty white colour. The extent of this diseased part was four inches in length, and one and a-half inch in breadth. The œsophagus was dilated, both above and below the seat of disease, and measured three and a-half inches across. Around the outside of this part the lymphatic glands were enlarged, and on section presented a black colour. At the concavity of the aortic arch and the bifurcation of the trachea, there were masses of these enlarged glands, about, altogether, the size of a duck's egg. The lower border of the diseased portion of the œsophagus reached to the level of the bifurcation of the trachea. On cutting open the commencement of both bronchi, the lining membrane was found deeply reddened, and presenting here and there small ulcerations. Abdomen.—The liver did not descend lower than usual. It was of a middle brown colour. In several places on its convex surface could be seen carcinomatous deposits of various sizes, from a horse-bean to that of a walnut, presenting a flattened, puckered surface, somewhat depressed in the centre. On making a deep incision into the organ a cavity of considerable size was laid open containing three or four ounces of grumous fluid. No pus was observed. Stomach.—This organ was of enormous size, filling the left upper third of the abdomen and reaching down in a somewhat vertical direction to a point below the umbilicus, then turning on itself, about the commencement of the pyloric third, the remainder ascended vertically to the right hypochondriac region. It contained about three quarts of a black, gruel-like fluid. On laying open the stomach a few red points on the mucous membrane were observed here and there, but no cancerous deposits nor any ulcer. The pyloric orifice was large, quite free from any thickening or contraction. Cardiac orifice natural. Nothing abnormal found in the spleen. Other organs not examined.

Remarks.—The practical interest of the foregoing case is not much, as no method of treatment yet discovered has availed to long postpone the destructive effects of internal cancer. Still it presents some points of interest to the pathologist. The history of the case shows that a small hæmorrhage took place from the gullet during the early stages of the disease, just as is observed in cases of carcinoma uteri. Immediately above the seat of stricture the gullet had dilated to form a pouch. Into this a few ounces of food was passed, which after a time gradually found its way down to the stomach. The pain chiefly complained of followed the course of the left upper dorsal and intercosto-humeral nerves. One of the most remarkable features in this case was the very large dilatation of the stomach. The common cause of this lesion, contraction and thickening of the pyloric orifice, being absent, the only possible cause which presented itself to my mind during the autopsy was paralysis of the par vagum on the left side. This nerve was remarked to be carried considerably forward out of its usual course by the mass of diseased and enlarged bronchial glands before described, and therefore subjected to an unusual pressure. Whether this be a sufficient cause I am not prepared to say, but nothing like mechanical obstruction to the exit of food from the stomach existed. Notwithstanding the very considerable amount of disease found in the liver, the patient did not complain of symptoms referrible to that organ.

Medical Times and Gazette.

SATURDAY, MARCH 30.

OUR HOSPITAL SYSTEM.

Proud as Englishmen justly are of the fact that so many of our most honourable national actions take the form of purely private benevolences, there is reason to believe that other systems have their merits as well as disadvantages. In the abstract it has always been admitted that an organised submission to one or a few master-minds forms the firmest safeguard of consistent policy and the most vigorous support of the executive in its functions. That these are only a part of the good results emanating from such a centralised form of administration as commends itself to the Continental character, is a conviction forced upon us by a comparison of the Hospital system as established in the French and Belgian capitals with the complicated and unequal creation of chance and interest, of ancient liberality and modern sentimentalism, which issues in the Medical Charities of the British metropolis.

The year recently expired has been eventful in the highest degree to most of these Corporations. An unusual scarcity of provisions has caused exceptional and reiterated demands for assistance on the part of Institutions approaching at other seasons less closely to the state of chronic bankruptcy which appears requisite for the success of some eleemosynary foundations. The internal management of others, and those among the best reputed for wealth and standing, has created more than the ordinary amount of debate and altercation, so that the general public has been forced, in a measure, to adjudicate upon their merits before contributing to the relief of human suffering by their instrumentality; and the much-vexed question of Special Hospitals, transgressing the limits of professional organs proper to it, has figured in the literary world, and has even filled space in daily journals, deprived during recess of the more exciting topics of political agitation.

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It is refreshing to turn from the pressing appeals of the *Times'* Supplement, each suing more earnestly than its predecessor for establishments of more or less value and respectability, to the quiet, official, unexcited tone of the *Compte Moral Administratrif*, as published for private circulation each year in Paris. The volume in size and type assimilates itself rather to the English "Blue Book," than to the highly-coloured statements which issue from our London Committees; and its object is throughout one of careful economical stewardship over funds competent, permanent, and nowise precarious. Facts show abundantly that the sums administered or collected in various ways for the maintenance of our London Hospitals are fully equal in amount to those of Paris, even relatively to the greater size of our metropolis; but it is to be suspected that a smaller proportional result is sometimes produced with us than flows from the careful supervision and equalised expenditure of the Parisian Infirmaries.

It would be hopeless to attempt any accurate comparison where details are so difficult to obtain, and the liabilities of error so numerous. But, undoubtedly, a most desirable step towards such an end is a classified arrangement of all existing institutions, with the further particulars that they may be willing to contribute. A survey on this plan was ably carried out five years ago by a Committee of the Statistical Society. What was then once for all undertaken by a private association might well be repeated from time to time in a more official form, and issued for the information of the public. We feel assured that all institutions, really deserving, would be gainers by publicity; and many of the complaints now raised so loudly against the diversion of charity from worthy into unnecessary directions would be brought to a simple arithmetical test.

But every one well acquainted with the internal working of Hospitals must be aware that much more is lost by defective system within the walls themselves than can be appreciated by any statistical or financial statement. For instance, no obstacle to general efficiency is more serious than a Medical Staff insufficient in numbers and unequal to the work laid upon it. It is true we habitually hear little of the evil results following from this, because the general mass of Hospital patients are quite unable to state their grievances, and usually are not in a position to appreciate the advantages of which they are deprived. But the Medical Profession must be fully aware how such deficiencies lead to real neglect of the sick and dying. Indeed, the most charitable construction to be put upon the hasty and incomplete examination too often bestowed on Hospital and Dispensary cases, lies in the utter impossibility of a more complete and conscientious research under the present disproportionate arrangements. A parallel result of the same order of things is the delegation of too much power to House-Surgeons and Dressers. As these young men are often able and hard-working, perhaps, in a limited degree, this plan is not to be censured; especially if it be understood that the Surgeon or Physician himself is present on every occasion for appeal, whenever the lesser experience of a subordinate might cause hesitation, or risk, of maltreatment. But we fear it is not an uncommon fact, and one which has certainly fallen more than once within our personal knowledge, that cases of severe illness have come and gone without even passing under the eye of the Medical man whose name is placed at the head of their ticket, and who in honour is responsible for their receiving, not mere temporising treatment, but the highest development of rational and scientific therapeutics.

Neither is the deficiency in a staff remedied by increase of the numbers and occupation of resident Medical officers. The lessons of experience and the general opinion of competent persons are not favourable to what might at first sight appear a satisfactory arrangement. The examples of Institutions where a Medical Superintendent is attached to the spot, and incapacitated by rule or by circumstances from extrinsic practice, afford little encouragement for their multiplication. It requires a man of more than ordinary energy and conscientiousness to withstand the enervating influences of privacy, routine, and irresponsibility which in such a post press heavily upon him. In short, it is practically admitted on all hands that patients never receive such close and critical attention as when they are periodically visited by Medical officers of high Professional standing, who have a name to keep up before the world, who are followed by an earnest and inquisitive class of students, and who are prevented from relapsing into listlessness by the avowed and honourable rivalry of their colleagues within the walls and of their contemporaries at similar Institutions.

Individual opinion will estimate differently the exact point at which this demand on the energies of Medical officers becomes excessive. A well known and distinguished Physician, whose letter to the *Times* we transferred to our columns last autumn, urged with much power and plausibility, the simple argument of time, and showed that the physical limits of mental work did not admit of an indefinite multiplication of Hospital out-patients. The same test applies with increased force to in-patients. These are selected usually from a manifold number of applicants, specially on account of the gravity or obscurity of their maladies; are often sent long distances from country neighbourhoods by old pupils of the Physician or Surgeon; and are not unfrequently brought in crowds from some accident or epidemic which has involved men and women, rich and poor, sober and drunken, starved and crapulous, every variety of temperament and circumstances. It is hardly possible to over-estimate the amount of personal care and attention to be bestowed on such as these; and is this practicable in wards where, as at some of our largest institutions, the number of beds allotted to each Surgeon varies from forty to eighty, and even rises to a hundred?

One argument for the extension of Hospital Staffs has hitherto not been much adverted to,—namely, the advantage which every Member of them would derive in public estimation from the augmentation of a class now too small to be fully appreciated. Little as the outer world know of the working of our craft, of the grades and diversities which distinguish its Members, all probably are in a degree alive to the special claim involved in connexion with a Hospital. So fully is this recognised in some quarters as to give colour to the allegation that the feeling has been turned to purposes of private interest by the creation of Hospitals excessive in number, and in object too restricted. Hereafter we may direct attention to some of these statements more specifically; in the meanwhile, however false they may be, they at least testify to our present position. We cannot but hold the opinion, that the increase of such a privileged order as the Hospital Physicians and Surgeons, so far from diminishing the individual estimation of its Members, would tend to increase it. Here, as in other matters, the rule of political economy, that "supply creates demand," is applicable, and the mass of patients would learn to require the qualification of Hospital experience, when it was more possible to obtain Practitioners possessed of it. A blow would also be struck at the anomaly which now exists, and which makes Hospital Physicians and Surgeons only a fraction of those Professional men who are entrusted with public confidence and responsibility.

In making the above remarks, we are aware that it is no new subject which calls them forth: indeed it has often occupied a prominent place in our columns since the years 1853 and 1854; but it is one which, like most others of a thoroughly practical nature, only gains force by repetition, and should be kept constantly before the attention of our Profession until the fullest requirements of good sense are

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carried out. There is, moreover, some satisfaction in recurring to the topic after a lapse of seven years; when scarcely one of them has passed without showing obvious signs of an extended acceptance accorded to views which we have from the first advocated. We rejoice to find public opinion moving in the same channel with our own convictions; and are anxious to reiterate the expression of our belief that such steps as have hitherto been taken towards an increase of Medical Staffs in the larger Hospitals are movements in the right direction, and that a still further and considerable advance in the same way would not only conduce to more careful treatment of the sick and wounded, but would redound greatly to the honour of the Medical Profession with the public at large.

THE WEEK.

Lord Shaftesbury, in the House of Lords, on the 21st inst., caused a resolution to be passed requiring that the number of houses, and of inhabitants displaced, shall always be inquired into when any Railway or analogous Bill is under consideration. His Lordship had been at the pains of making a personal careful survey of the houses in the northern part of the City, which it was proposed to destroy for the construction of the Metropolitan Railway. The account which he gave was, that the population of the proposed line consisted of artisans of a superior class, that the houses were by no means unwholesome, and that the inhabitants looked upon removal as a thing almost ruinous; and that the destruction of these houses would overcrowd the remainder. The reply is that the removal of a certain amount of houses and people from a densely-inhabited district is in itself a benefit, and that the vicinity of a railway terminus may give opportunity to the most intelligent artisans of living out of town. Individual cases of hardship may arise here and there, and some houses may be pulled down which are fit to remain; but we affirm most positively that every wholesale demolition of the older parts of London is a benefit on the score of health and morals. The decayed houses in a district which has lost its vogue, each of which has been inhabited by one middle-class family for a century, are not now fit places for the reception of as many families of artisans as there are rooms in each house. The frugal, respectable artisan, will always get accommodation; the thriftless drunkard must "move on."

Mr. B. Johnstone inquired in the House of Commons last week what number of boys was on board the *Britannia* training-ship at Portsmouth? Whether there was sickness on board from overcrowding? and whether the sewers of Gosport were discharged into the harbour in the vicinity of the *Britannia*. It was admitted in reply that as many as 38 out of 204 cadets had been ill with measles and fever, but that at present there are but 5 on the sick list. No answer was given to the charge of overcrowding; and the allegation that the fever was "never made out to be due to the drains of the vicinity," is not satisfactory. A Medical Officer of Health at Portsmouth would have no sinecure.

In Mr. Jeaffreson's "Book about Doctors," to which we devoted a leading article when it first appeared, there is a mistake, first made, it seems, by Dr. Forbes Winslow, in his "Physic and Physicians," and copied by Mr. Jeaffreson. This mistake is a very glaring one, and reflects upon the character of one of our "Great Ones of the Past." We therefore gladly comply with the request of Dr. Baillie's son, and insert the following letter:—

"March 14, 1861.

"I beg a small space in your columns regarding a statement in a recent publication, which would, with some, unjustly affect the character of a distinguished man. In this work, entitled 'A Book about Doctors,' a story is told of a young Scotchman, named Matthew Baillie, afterwards high in his Profession, who, being rejected in an Examination by the authorities of the Royal College of Physicians, endeavoured to fight a duel with one of the censors, and was referred by him for this purpose to Sir Hans Sloane, at that time the President of the College. This account, of course, relates to my father, Dr. Matthew Baillie, the nephew of William and John Hunter, and the author of the important work on Morbid Anatomy; but it is totally incorrect. In regard to him, dates render the matter impossible; for he was born in 1761, and Sir Hans Sloane died in 1753. The story is, in all its parts, entirely without foundation at any period respecting the eminent Physician in question, as the annals of the College, carefully inspected, demonstrate. The rejection of an individual of some subsequent note, it seems, did take place under the Presidency of Sir Hans Sloane, but all this had passed away before my father was born.

"I am, &c. W. H. Baillie."

In New Zealand, as elsewhere, the Medical Officers of the Army win golden opinions for their courage, and for the little regard they have for their own lives in comparison with the claims of duty and honour. The *Nelson Examiner* says, that at the taking of the *pah*, or fortified Maori camp, at Matarikariko, Dr. Neill, of the 65th Regiment, found himself short of Assistants under rather pressing circumstances, so he himself, with a corporal, rushed out with a stretcher and brought in a wounded man, receiving a bullet across the knee, and one through his cap.

The unfortunate woman, Mary Ann Brough, formerly nurse to the Prince of Wales, who was tried for the murder of six of her children at Esher, in 1854, and was acquitted on the plea of insanity, died last week in Bethlem Hospital. Soon after her reception in that Hospital she exhibited symptoms of brain disease, which culminated in repeated attacks of paralysis and apoplexy.

The College of Physicians made their first annual election of President on Monday, and elected their old President, Dr. Mayo, as the first under the new system. At their second examination for the new licence, eight candidates presented themselves; five passed, and three were rejected. At the first examination two were rejected out of nine. Considering that all the candidates were registered Practitioners, the proportion of rejections seems very large.—The case between the College and Apothecaries' Company will probably be argued before Vice-Chancellor Page Wood on the 15th of April.

The following is part of an advertisement which appeared in the *Aberdeen Journal* of the 20th inst. It is highly necessary that some inquiry should be made into the nature of this "Protection Society," and of the "sanction of the Medical Faculty," and the names of the "legitimate members of the Profession," under whom it is alleged to be founded. "The Patient's Guide" must be something curious:—

"IMPORTANT NOTICE.

"MEDICAL AND INVALID PROTECTION SOCIETY.

"(Founded under the sanction of the Medical Faculty.)

"Invalids wishing to consult the most distinguished Physicians, Surgeons, Oculists, or Aurists, can have the benefit of fifteen years' experience gratuitously, as to whom they should consult; also as to Fees, and the various Free Dispensaries and Institutions for the necessitous poor, etc. Such advice must prove a boon to those requiring Medical aid during the present era of empiricism, when we consider that this metropolis and the provinces are infested with unprincipled pretenders, who not only make extortionate charges,

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but likewise destroy the constitution with their disgusting drugs and mercurial preparations, advertised under high-sounding titles. Therefore, to suppress such practices, and protect the qualified Practitioner, as well as the patient, this Society has been formed under the sanction of legitimate members of the Profession.

"Every information given to invalids personally or by letter on receipt of a stamped and directed envelope; and those residing at a distance may be furnished with 'The Patient's Guide,' which will be forwarded on receipt of six stamps; and by the adoption of the advice therein contained, the views and wishes of invalids (in the majority of cases) can be carried out, without the expense and trouble of a personal visit. All letters to be addressed to

"Mr. J. Franklin, Hon. Sec.
"Newman Chambers, Middlesex Hospital, London."

At the Liverpool Assizes, a miner, named Quail, brought an action against Mr. Hall, Surgeon, for negligence. One of his legs had been injured severely, and after treatment he continued lame, with a projection of the tibia backwards into the ham. It was contended that a dislocation of the tibia backwards had been overlooked, and omitted to be reduced. For the defendant it was contended that the injury was a transverse fracture of the upper part of the tibia and fibula; but the fracture got displaced after it was set; and that the patient refused to allow it to be reset. The jury found for the plaintiff, damages £45. The moral is that, if a patient refuses to allow the Surgeon to do what he thinks right, the latter had better have a consultation, to support his opinions, and if not acceded to, he should wash his hands of the case.

A writer in the *Times* makes the practical remark that a diminution of the diet of the convicts at Chatham might diminish their restlessness and tendency to revolt. A man or child well supplied with material for muscle and nerve force *must* use it up somehow; in mischief, if in no other way. Professor Liebig's doctrines point to the same advice.

We regret to see that Mr. John Bride, Surgeon, of 83, High-street, Shadwell, is said to have committed suicide by taking laudanum. No cause, except mental depression, is assigned for the unhappy act.

Five children have been poisoned—one fatally—by eating the raw roots of the wild parsnip, *Pastinaca sativa*.

REVIEWS.

Archæology: its Past and its Future Work. By J. Y. Simpson, M.D. 8vo. Pp. 77. Edinburgh: 1861.

Ten Years: an Inaugural Lecture. By J. A. Symonds, M.D. 8vo. Pp. 43. Bristol: 1861.

Ale, Wine, Spirits, and Tobacco. By John Barclay, M.D. 8vo. Pp. 69. Leicester: 1861.

These three Discourses have been delivered this year in three of the chief provincial cities. The first was delivered at Edinburgh before the Society of Antiquaries of Scotland, by Dr. Simpson, who, to the numerous Professional titles of honour which he possesses, adds those of Vice-President of the Society of Antiquaries of Scotland, and member of the Archæological Societies of Athens and of Nassau. The second was delivered at the Bristol Institution for the Advancement of Science, Literature, and the Arts. The third before the Leicester Literary and Philosophical Society.

We look upon these Discourses with the most lively satisfaction. They show the Physician in the very place and function which his education and office qualify him to fill. They show him not merely in the limited, though honourable, capacity of one who relieves suffering and corrects the aberrations of Nature, but of one who in the necessary cultivation of his own special duties, is obliged to keep the whole field of human knowledge and thought—past and present, moral and physical—open before him; and who is able out of the multitude of his stores, to teach the value and dignity of human life, and to demonstrate the influence of those innumerable forces which push man onward in the path of civilisation, or drag him downwards into degradation and decay.

Dr. Simpson in his Discourse occupies himself with the past. And he treats of it nobly. The day is long gone by (as the Bishop of Oxford well observed at a past meeting of the Archæological Institute) when the antiquary was but a collector of curiosities and a pedant in trifles; one whose love for the mouldering relics of a past age smothered his sympathies with the exuberant living realities of the present. Now he is a practical philosopher, busily engaged in tracing out the almost obliterated footmarks which show the straggling path by which man has attained to his present intellectual eminence. "The leading object and intent of all his pursuits," says Dr. Simpson, "is *man*,—and man's ways and works, his habits and thoughts, from the earliest dates at which we can find his traces upon the earth." The notion must be utterly discarded that he is in search of mysteries. It is man and his nature, improved and improving, but *one* from the beginning, that the philosophical archæologist seeks to understand. We search into the past, in order fully to comprehend the present; and conversely we must reason from man of the present, in order to interpret the man of the past. "Let us study backwards," says Dr. Simpson, "from the known to the unknown. In this way, we can easily come to understand how our ancestors made those single-tree canoes which have been found so often in Scotland, by observing how the Red Indian, partly by fire, and partly by the hatchet, makes his analogous canoe at the present day; how our flint arrows were manufactured, when we see the process by which the present Esquimaux manufactures his, how our predecessors fixed and used their knives and hatchets, when we see how the Polynesian fixes and uses his stone knives and hatchets now; how, in short, matters sped in respect to household economy, dress, work, and war, in this Old Caledonia of ours, during even the so-called Stone Age, when we reflect upon and study the modes in which matters are conducted in that New Caledonia in the Pacific—the inhabitants of which knew nothing of metals till they came in contact with Europeans, not many long years ago; how, in long past days, hand and home-made clay vessels were the chief or only vessels used for cooking and all culinary purposes, seeing that in one or two parts of the Hebrides this is actually the state of matters still."

In illustration of the doctrine that the man of the past age—he who is separated from modern civilisation by *time*—is virtually identical (in his habits) with him who is separated by space, or by other cause of want of intercourse, Dr. Simpson points to the rude earthen vessels now used in the Isle of Lewis for cooking, dyeing, and household vessels, and rude as the rudest cinerary urns. Amongst the people of Barvas a metal vessel or pot was almost unknown twelve or fourteen years ago: their houses have neither windows nor chimneys, neither tables nor chairs, and the cattle live under the same roof with their masters. In the adjacent parish of Uig, the ancient bee-hive houses (or Picts' houses) are still inhabited at times. The present life of the Hebrides shows the past life of the Celtic race: and this not merely in material objects. The superstitions which survive in out-of-the-world districts are relics of the modes of thought which once were universal. Somersetshire farmers now physic their cattle according to the astrological tables in Zadkiel's Almanac. Within twenty miles of Edinburgh, living witnesses can testify to the burying alive of a cow as an offering to the Spirit of the Murrain, and small enclosures are still consecrated to the "Goodman," or tutelary demon, that he may abstain from blighting the rest of the farm. In like manner, the existing debased popular superstitions of the peasantry are the relics of the highest mythological lore of the past.

Thus Dr. Simpson shows how archæology may be made fruitful as a contribution to the knowledge of the human race and how the past and present mutually illustrate each other. Dr. Symonds takes the immediate work of the day, and the

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history of the last ten years, in the results of which, if we may use the words, our present life is passing. While the tone of Dr. Simpson's discourse is of necessity Conservative, Dr. Symonds' is Liberal and Progressionist, and he views civilisation in its march now, instead of the foot-marks which show its bygone movements. "Ten years," he observes, is a large portion of time. It is a seventh of that part of the life of man which Moses, in his well-known psalm, considered worth possessing. Ten years suffice to destroy the work of ages. One decade destroyed ancient Egypt! "The old monarchs of the lines of Amenoph, Thothmes, and Rameses, might still look down from their colossal statues," "with their solemn, sedate, kingly eyes (such as are yet visible on the walls of their sepulchres) they might still be looking down on the scenes of their ancient glory, but for the havoc, and wreck, and ravage of those ten years which were given to the licence of drunken, insensate Cambyses." Ten years saved Greece, for herself, and for the intellect of all time. "Imagine the exchange of Sophocles and Pindar for Hafiz and Sadi, ethics of Aristotle for mystical Zenda Vestas, gods of the Parthenon for bulls of Nineveh! Who can tell whether this, and worse than this, might not have happened, but for the glorious ten years which began with Marathon and ended with Salamis!" The ten years which intervened between the flight and death of Mahomet, raised him to the sovereignty of a mighty people, and laid the foundations of that spiritual empire which has prevailed from the gates of Delhi to the Pillars of Hercules, which has obtained mastery over the very cradle of Christianity, and which, but for Charles Martel in the West, and the Polish warriors in the East of Europe, would have girt round the shores of the Mediterranean, and strangled Western, as it had Eastern, Christendom.

Thus proceeding and rapidly unfolding to his auditory a series of the decades which have been the most critical in the history of man, Dr. Symonds passes in review the state and progress of science and literature in that decade which closed with the year 1860. It has not, perhaps, teemed with new and brilliant discoveries such as that of the alkaline metals by Davy, the fossil geology of Cuvier, or the analysis of the nervous system by Charles Bell, or the electro-magnetic researches of Oersted, or the railway system, the penny postage, or electric telegraph, which graced the earlier decades of this century; but it has not been barren. Admitted principles have received further extension; larger generalizations of facts have been introduced; the laws of the world of phenomena have been simplified; Grove has shown the correlation of forces, and reciprocal connexion of heat, light, electricity, and chemical attraction; Faraday has speculated profoundly on the conservation of force, and shown that motion is never lost, but that when apparently lost it has only passed into some other form. Dr. Symonds thinks the time not far distant, when some great generalization may be established which will include not only the already-mentioned forces, with their reciprocal transmutations, but also the attraction of gravity. "Force cannot be severed from matter, and matter is known only through force; and forces are only modes of motion in matter." We cannot conceive of matter apart from motion, nor of motion, without matter as the subject of it. All motion is a mode of thought, and motion is inseparable in idea from time. By thus combining matter, motion, and time, we attain to a greater conception of simplification of cause and unity of plan in the created universe. Equally in the organic world does the philosophic mind pant after a similar scheme of simplicity; and the hypotheses of Darwin, if not proved, are to be treated with that kind of respect in this decade, which may be the forerunner of their acceptance in the next.

Continuing his theme, Dr. Symonds rapidly glances at the history of recently-departed workers in history, philosophy, theology, poetry, metaphysics, and high art, and pronounces a fitting eulogy on that philanthropic band who study the conditions out of which spring disease and crime, with a view to the raising the standard of our people in health and morals; and he concludes with an eloquent peroration; in which he shows that, favoured as England has been above other nations, protected alike from the foot of the invader, from the licence of revolutionary mobs, and the stern repression of a military despot, she ought to set the world an example in all that can advance the glory of God and the highest welfare of man.

The subject of Dr. Barclay's Lecture relates to the every-day affairs of life, and, while it admits not of the higher flights of philosophy or poetry, is treated as it requires, with shrewdness, practical wisdom, and moderation. He repudiates equally the fashion of flying to alcohol as a universal remedy, and the fanatic notion that all alcohol in any dose is a poison, and "corrugator of the coats of the stomach." He is, by-the-bye, scarcely just, when he speaks of the "*London* heresy of promiscuous stimulation;" for it must be remembered that the late lamented Dr. Todd and his disciples are a very small fraction of "London" Practitioners, and that the London Practitioners, as a body, protest against the universal brandy bottle, just as they might against the universal black draughts and starving routine of some "Country" Practitioners. Whilst repudiating the promiscuous stimulation heresy, he urges upon his hearers the enormous value of alcoholic liquors, as adjuvants to ordinary food, and as means of saving life in diseases hopeless without their aid. Whilst admitting the mortality and crime caused by intemperance, he repudiates the exaggerated statements of the teetotal books. In reply to the hackneyed cry that three-fourths of disease are due to drink, he adduces some novel and remarkable tables, showing that in his private practice the per-centage of disease attributable to drink is only 13·4, and amongst the poor only 3·28; whilst tobacco, so much and so constantly railed at, is shown to have been instrumental in causing disease in only one patient in 200. All the patients in this computation were above twenty years of age. Plenty of light wine—abundance so great that it shall not be looked upon with the longing which attends almost all forbidden luxuries—and the substitution of it for heavy ales, are among the means which Dr. Barclay believes will still further promote the happily increasing spread of temperance. He shows from the admissions of the Teetotal party how little good they really effect, while their frantic and uncharitable denunciations render "the cause of temperance" odious or ridiculous to the truly sober part of the community. He justly satirises that vain and foolish egotist the Dean of Carlisle (formerly notorious as Mr. Close, of Cheltenham), who, *since having the gout*, has been advised to be a total abstainer (which probably he should have been long before), and now disinterestedly persuades everybody else that, because *he* has the gout, *they* may not use the bounties of God with moderation. He then concludes his most comprehensive, sober-minded, and thoroughly practical lecture by showing the true nature of temperance, and that no vows nor pledges can be substitutes for the self control and watchful conscience of the Christian, although repressive laws and ostentatious vows may be necessary for those who are too brutal to restrain themselves at all, or so weak that they must make a public parade of their freedom from just one form of sensuality.

Our readers will thank us for making known to them these addresses, although we really can give but a most inadequate conception of their merits. We advise our readers to make them their intellectual food for some leisure evening, and then they will agree that our Profession is worthily represented to the world when such men as Simpson, Symonds, and Barclay come forth in their respective districts, as public teachers of the grandest views of the history and destiny of men, the profoundest speculations of philosophy, and the control of the appetites in daily life, and the mode of using the good creatures of God without abusing them.

Clinique Médicale sur les Maladies des Femmes. Par M. Gustave Bernutz et M. Ernest Goupil. Tome Première. Pp. 591. Paris: Chamerot. 1860.

(*Medical Clinique on the Diseases of Women.* By M. Bernutz and M. Goupil. Vol. I.)

The work of which this is the first volume bids fair to be a most valuable addition to the literature of this department. We gather that it is not the authors' intention to write a systematic treatise of all female diseases, but rather to present us with clinical observations of the more common and well recognised, having special reference to symptoms and general pathology. This first volume considers three of the most important if not the most fatal of female diseases:—First, those depending upon retention of the menstrual secretion. Second, the different varieties of peri-uterine hæmatocele. And third, intra-pelvic hæmorrhages caused by extra-uterine gestation.

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Upwards of eighty well-told cases are given to illustrate these several maladies, and are related with a fullness which enhances considerably the value of the work; perhaps in this respect they are a little overdone. Eight different varieties of menstrual retention are described.—namely, that from congenital or accidental obliteration of some part of the vulvo-uterine canal; congenital or cicatricial narrowing of the vagina or cervix, with mechanical dysmenorrhœa; retention from uterine enlargement; or from obstruction of the cervical canal by organic products; or from uterine deviations; or spasmodic contraction of the excretory canal; or lastly, from some abnormality in the Fallopian tubes The special characters of all these are described with their symptoms, course, termination, diagnosis, and treatment. We find that in eight cases of congenital or accidental partial or complete obliteration of some part of the genital tract in which operative measures were resorted to, all ended fatally. In most of these the vagina was at fault; while in five cases of simple imperforate os, either congenital or acquired, puncture was followed by a cure. Cases of retention from hypertrophied uterus, or from obstruction of the os by tumours, even where they led to effusions of blood or menstrual fluid into the pelvic cavity, and required puncturing through the vagina, were, in the majority of cases quoted, successfully terminated. Those cases of retention with pelvic hæmorrhagic effusion requiring puncture and ending fatally were mostly found, on post-mortem examination, to have some defect, with probably rupture, of the Fallopian tube.

Nineteen cases of the different forms of peri-uterine hæmatocele are given. None of the patients exceeded 36 years of age, and thirteen were from 22 to 30. Of the whole number thirteen died either within a few minutes or in forty-eight hours. Three of the cases were so sudden that poisoning was suspected, the remaining six recovered; in three of them a puncture was made through the vagina, and the contents evacuated; the other three were cured by general Medical treatment. Of the fatal cases the hæmorrhage was found to have proceeded from the uterine cavity itself along the Fallopian tubes in four instances; in two of these the bleeding was attributed to blood-poison, the patients having at the time rubeola in one case, and purpura in another. In *one* only of the remaining cases was the disease found to be in the *left* side, and this was a varicocele of the ovary. In the other *eight* cases the hæmorrhage was supplied from the *right* side. This is a very remarkable fact, which should be borne in mind, though it does not appear to have specially attracted the attention of the authors. Two were cases of rupture of the right pampiniform plexus, two rupture of the right Fallopian tube, and four rupture of the ovary on the same side.

Turning now to the third part of this work, which has been entirely written by M. Goupil, we find that of the fifteen cases of extra-uterine gestation all terminated fatally. Four at the sixth week, one at eight weeks, six at three months, and one at six months. The rest are not defined. Six occupied the right side, four the left. All the patients who have come under M. Goupil's observation were multiparæ. This, however, we know is by no means without exception, a case of extra-uterine gestation, occurring in a primipara, was related in this journal not long ago. One of the earliest and most constant symptoms of this occurrence, according to the author, is a tedious, persisting, but not abundant menorrhagia, beginning soon after conception. He does not think there is so much difficulty in the early diagnosis of these cases, when a general view of all the symptoms is taken. The highest importance is attached to the most absolute rest and quiet, as tending to prevent a rupture; and opium he regards as the only remedy of importance. Should the patient recover the shock of rupture of the fœtal cyst, and the blood become encysted in the pelvic cavity, he believes it is best not to attempt to open the cyst.

The first part of this book will well repay the most careful study; the different forms of menstrual retention and their consequences are at all times subjects of the most anxious consideration to the Obstetric Physician, and they are here treated in a way superior to any with which we are acquainted in our language. Special attention has been paid by the authors to the symptomatology of these affections, and the descriptions here given are very accurate.

The different varieties of hæmatocele are considered under five heads—first, hæmatocele symptomatic of rupture of a vessel of one of the genital organs; second, from some error in the menstrual excretion; third, hæmatocele symptomatic of rupture of the ovary or Fallopian tube; fourth, metrorrhagic hæmatocele; and lastly, that due to a peculiar hæmorrhagic form of pelvic peritonitis. In all cases, M. Bernutz is opposed to opening the cyst, notwithstanding the high authorities in favour of this proceeding, both in France and in this country; he thinks it ought only to be done as a last resort, when the condition of the patient makes it probable that pus has been formed in the cyst.

From the character of the first volume we look forward with anticipation to the second, and if we may judge from the present, the Profession will be much indebted for the labours of MM. Bernutz and Goupil.

The Forms, Complications, Causes, Prevention, and Treatment of Consumption and Bronchitis. By James Copland, M.D. 8vo. Pp. 440. London: 1861.

There are few diseases on which more has been written than those which are the subject of this treatise. Phthisis is, especially, the predominant disease of this country, as well as of other countries on the Continent of Europe; and in England it is known to be twice as fatal as any other disease. Yet while it is a disease which the Physician has constantly to treat, our knowledge of the pathology of pulmonary phthisis has not hitherto tended in a proportionate degree to promote the success of its Medical treatment.

The recorded experience, therefore, of one who is now a veteran in the Profession, may be presumed to be of no ordinary value; and still more so when the reputation of the author of the work before us has been already so well established as a writer and as a Physician. Of such a disease, then, as we know consumption to be, we cannot but think that such a man as Dr. Copland promotes the Physician's office by recording in this compact form his experience of a long Professional life. He began the study of disease at a time when a close observation of the past history and existing state of individual patients, combined with a due appreciation of the effects of remedies, were the sole guides to practice. He has since lived to see and to acknowledge that pathology and diagnosis have furnished more precise information regarding the nature of these diseases, whereby the Physician has been enabled to employ his remedies more appropriately than heretofore, and with more frequent and certain success.

Although we regret to observe in this treatise that there is no reference to the more recent accounts of the morbid anatomy of tubercle as given by Virchow and by Dr. Radclyffe Hall, yet we do not know of any other treatise on the subject in the English language which is so exhaustive and erudite as the one before us. It is full of detail, and although there is considerable repetition (probably to be attributed to the extremely systematic form in which it is written) yet the whole is so practical in its tendency, and especially in pointing out those many predisposing causes to phthisis, suggesting the means of prevention as well as of cure, that the work deserves to be carefully studied in all its bearings.

The book consists of three parts, all of them more or less embraced in a broad view of Pulmonary Consumption.

The first part is a complete treatise on Pulmonary Consumption; and it appeared first as an article in the third volume of the author's "Dictionary of Medicine." The edition now given to the Profession, is said to have been revised by the author, and very considerable additions have been made to it. The same remark applies to the second part, "On Laryngeal Consumption;" while the treatise on "Bronchitis" is to be regarded as an original article. In this latter part we again regret to find no notice taken of the more recent writers, especially of Dr. W. T. Gairdner's Papers on Bronchitis, and of Dr. T. Peacock's Papers on so-called Plastic Bronchitis.

On Diseases Peculiar to Women, including Displacements of the Uterus. By Hugh L. Hodge, M.D. 8vo. Pp. 469. Philadelphia: 1860.

We have been disappointed with this handsome volume of the Professor of Obstetrics and Diseases of Women and Children in the University of Pennsylvania. The part on displacements of the uterus is the best; but it is injured by several very incorrect engravings.

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NEW EDITIONS.

New Editions have accumulated upon us so fast of late that we are compelled to pass several of them over with a very few lines. This is of less importance, as most of them are well-known works of which it is only necessary to state that they have re-appeared.

The *Eighth* Edition of Mr. Erasmus Wilson's *Anatomists' Vade Mecum* appears with some new engravings and other improvements.

The *Third* Edition of Mr. Galloway's *Manual of Qualitative Analysis* contains various additions, such as the photo-chemical methods of Cartmell and Bunsen.

The *Eleventh* Edition of the *Vestiges of the Natural History of Creation* contains many new "Proofs, Illustrations, Authorities," etc. with replies to the objections of Hugh Miller, Sedgwick, etc., and a note on Mr. Darwin's views.

The *Sixth* Edition of Sir Charles Bell's classic Bridgewater Treatise, "*The Hand*," appears as revised by Mr. Shaw, and with an extremely interesting general account of Bell's Discoveries in the Nervous System.

The *Second* Edition of Dr. Leared's unpretending work, *Imperfect Digestion*, is very wisely kept near its original limit as to space; but various additions have been made which render it even more useful than before.

The *Third* Edition of Dr. Wright's treatise on *Headaches* affords proof of careful revision. Notes of cases have been added, and a copious Bibliography.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

ON A NEW OPERATION FOR THE RADICAL CURE OF HERNIA.

By Professor CHISHOLM.

This operation, by Professor Chisholm, of South Carolina, is thus described by one of his pupils:—"These and other considerations have induced Dr. Chisholm not to rest satisfied with the successes gained even by his modification of Wood's operation, but to add a still greater improvement, simplifying the entire procedure, and obviating nearly all the objections which have been, or may be, urged to Wood's.

"The new operation is as follows: The scrotum having been invaginated upon the finger—as the only mode of guiding the needle in its passage—a long, strong, curved needle, fixed firmly in a handle, and armed with silver wire, guided by the finger, transfixes the scrotum at the apex of the invaginated portion, passes through the internal column, and appears through the skin of the abdomen, when one end of the wire is drawn out. The point of the needle is then drawn backwards, and disappears again in the canal. Its direction is then changed. Whilst still embedded in the scrotum, and guided upon the finger, its point is made to traverse the external column of the ring, near Poupart's ligament, lifting the skin of the abdomen. By gliding the skin upon the needle, the point appears through the small puncture made by the first passage of the needle, when the other end of the wire is seized, the needle is unarmed and withdrawn through the scrotum. The finger is now removed from the canal, and the two ends of the wire being drawn upon the loop, it dissects the cellular tissue up to the columns, which it hugs closely. By twisting the ends of the wire the columns are felt approaching, until they are brought into such close apposition as to allow nothing to pass between them—the spermatic cord in its exit filling up all the available space remaining of the ring. When the ring is felt closed, the twisted wire is drawn firmly outwards, and clipped off as close as possible to the skin, so that, when the traction on the skin of the abdomen is removed, the gliding back of the integuments to their normal positions conceals completely the ends of the small loop of silver wire. The scrotum has already fallen back to its pendent position, and the only trace of an operation having been performed is in the two small punctures, one in the scrotum and the other in the abdomen, which require a careful search to find them, and which will heal up in a few hours, hermetically incarcerating the silver wire.

"A moderate inflammation follows the operation, without much pain or swelling, and without any fear of suppuration. The wire is soon embedded in a lymphy deposit, which will not only enclose it, thus isolating it from the tissues, but, at the same time, agglutinates the columns together as an additional security to the success of the operation. The patient is kept quiet in bed four or five days, opium being given to insure rest and prevent action of the bowels. When the inflammatory stage has passed, a cathartic is administered, and the patient can quit his bed, resuming his occupations in a few days. The silver wire remains a permanent application. An essential element in the success of the operation is that the loop encircle the columns of the ring near their points of attachment to the pelvis. Otherwise, the columns cannot be approached, the ring remains open, and the results can only be negative. If this step of the operation be carefully followed, a radical cure may be nearly guaranteed."

The advantages of the operation are the short time the patient is detained in bed, the slight amount of inflammation produced, the dispensing with the use of a truss, and the security against relapse, consequent on muscular effort—the reliance being placed, not on newly-formed adhesions, but on the silver wire. When the protrusion is large and the ring voluminous, several points of suture may be applied through the same punctures. The objection that the wire will always act as a foreign body is shown by experience to be unfounded, as it may remain harmlessly imbedded in the tissues for any length of time. Four cases only have as yet been so operated upon, and that only since November, 1860.—*American Medical Times*, No. 5.

[To the above we may append an account of a mode of operating found useful by Dr. Agnew, of the Philadelphia Hospital, and described in the *North American Medico-Chirurgical Review* (January, p. 117), in the following terms:—"The instruments necessary for the operation consist, first, of two semi-cylinders of steel, 3 inches long and 1¼ inches in circumference, which can be separated from each other by a screw in the handle of the instrument, and on the internal face of the lower blade of which are two parallel, longitudinal grooves; secondly, of a spear-pointed needle, slightly curved at the extremity, and supported on a bone handle; and, thirdly, of several stout needles of from 2 to 2½ inches in length.

"A portion of the scrotum is carried in followed by the metal cylinder, and thrust up to the internal ring. The blades are now separated by means of the screw, and the long needle, armed with a thread of silver wire, is carried along one of the grooves to the upper end of the cylinder, and then made to pierce the exterior parietes of the inguinal canal. The thread is then removed from the needle, the latter withdrawn, and the other end of the wire passed through its eye, when it is passed along the other groove and made to emerge a short distance from the first. It is again unthreaded, and after its removal the two ends of the wire are drawn up tightly and twisted over a small roll of lint. This effectually holds up the small plug of integument to the very summit of the canal, and as the silver thread manifests but little disposition to ulcerate out, it may be allowed to remain for a considerable time. The second and most important step of the operation consists in screwing the handles of the instrument completely together, (thus separating the blades in the canal to their greatest possible extent), and then, carrying across the canal, between the blades, four or five threads, at equal distances from each other. The first thread should be composed of silk, and be introduced as near the internal ring as possible. The remainder should be of silver, the last one being close to the external ring. These transverse threads can be lodged in the canal with great accuracy by this method, the cord being protected from injury by the posterior blade of the instrument. This latter being withdrawn, the patient is confined to his bed, the parts being protected by a compress and roller, and the wires should be removed as soon as the plastic exudation has bound the invaginated plug to the walls of the canal, which in the cases operated upon required twelve days."]

ON CRETINISM AND IDIOTCY.

By Dr. GUGGENBÜHL.

The following is the abstract of a paper recently sent by Dr. Guggenbühl to the Académie des Sciences, and referred to a committee consisting of MM. Geoffrey St. Hilaire, Andral, and Rayer:—

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"The cases collected during the last twenty years at the establishment of the Abendberg, near Interlaken, prove that cretinism is a serious affection of the cerebro-spinal system, consisting in several pathological changes produced by the irregular and slow development of the body, and obtuseness of the senses and intellectual faculties.

"1. Observation has most frequently exhibited cerebral œdema, with dilatation of the lateral ventricles, whether filled or not with serum. At a more advanced stage, the contiguous convolutions become softened, but no pathological change has been discovered by microscopical examination. 2. Next we have imperfect or retarded development of portions of the brain, especially the anterior and posterior lobes, and sometimes a general atrophy of the organ. In more rare cases, a hypertrophy of the brain is the cause of the cerebral stupor. 3. In some exceptional cases there is induration of the brain, or of parts of it. 4. Hypertrophy of the bones of the cranium characterises the rickety form of cretinism at a more advanced period. 5. The premature closure of the suture (fontanelle?), in consequence of inflammation, produces deformity of the cranium frequently in cretins and idiots; but as I have often observed the same thing in persons in full possession of their intellect, I do not regard this as one of the pathological causes of cretinism. This word is, indeed, but a collective name expressing different pathological conditions, with a tendency to progressive degeneration, and to enfeebling or annihilating the intellectual faculties.

"Observation in the Alpine valleys shows that a group of precursory symptoms must be taken into account, which may affect great numbers of the inhabitants without their intellectual faculties suffering. These are goître, deficient height, a disproportion between the body and the limbs, defective external senses, especially that of hearing, and strabismus. The pathognomic symptom of cretinism is 'cerebral stupor,' but this does not prevent certain isolated faculties becoming well developed, as an extraordinary memory for languages, music, or drawing—facts not infrequently observed at the Abendberg.

"Fodere maintained the hereditary character of cretinism, and it certainly appears that in the valley of the Aoste, where he practised, there are some villages in which it has been propagated from generation to generation. More extended observation shows that it is rather a local phenomenon, and that hereditariness elsewhere generally plays a very secondary part. At the Abendberg it is only in one-thirtieth of the cases that the parents have manifested cretinous symptoms. Still it must be admitted that the germ or predisposition is developed in the maternal system, inasmuch as families are everywhere met with in which a portion of the children become cretins while the rest retain their health and intelligence, although the same external influences have prevailed in both instances. Moreover, it is certain that the most attentive observation after birth is not always able to detect these germs with certainty, inasmuch as these children in no wise differ from others who are well organised but weakly. It is only, in the majority of cases, under the influence of pernicious local causes that cretinism becomes developed during the first three years of life. This generally takes place about the epoch of the first dentition with symptoms of softening of the bones (the rickety form), of hydrocephalus (the hydrocephalic form), of scrofula (the scrofulous form), or of general atrophy (the atrophic form). Authors have generally admitted three degrees of cretinism, according to its more or less incomplete development; and such a division has its practical value. Several others, and especially M. Ferrus, have with good reason established a distinction between cretinism and idiotcy which is quite in accordance with the experience derived from the Abendberg. Idiotcy is far less curable, although idiotic children are generally well formed, strong, and robust. In this they differ from cretins, who suffer from muscular debility and other infirmities. It is at an early age, and especially within the first six years, that this great evil must be attacked, and the progress of intellectual, physical, and moral torpidity be arrested. The documents which I have had the honour to transmit to the Academy prove that our efforts are often crowned with a success sufficiently complete to reconstitute the human type and restore useful members to society, or, at the least, to obtain a notable amelioration.

"The fundamental principle in the treatment of cretinism is the strengthening the physical development prior to the development of the faculties of the senses; for experience has proved that every attempt is dangerous as long as the physical powers have not become regenerated, and the nutrition and functions of the nervous system regularised. To this end, we employ tepid aromatised baths, frictions, medicinal agents—such as cod-liver-oil, iodide of iron, electricity, etc.—a strengthening diet, abundant exercise in the pure mountain air—which is itself one of the most powerful fortifying agents, by its regularising action on nutrition and hæmatosis. Every asylum for the reception of young cretins should be managed upon a medico-pedagogic method. It should be at once an Hospital and a school, and should possess workshops in which the patients may be taught different trades. Cretins of a more advanced age and incapable of receiving elementary instruction, have manifested a particular aptitude for mechanical and agricultural labours. Up to the present time, we have obtained a more or less complete cure of all cretins under six years of age who were capable of pronouncing a few words, and who were exempt from convulsions—always a very grave complication. One class of subjects of a more advanced age has furnished satisfactory results,—viz. that termed by the Sardinian Commission *cretinous*. The numerous individuals of this class can express in short sentences the most common objects of life; but in them low and vicious propensities are developed, and may reach as far as a kind of insanity, the subjects abandoning themselves, in the midst of their families, to debauchery and sexual excesses. It is in these cases that our method has led to excellent results, even at the age of twenty or thirty years,—of which many examples exist at the present at the Abenbderg, where they are employed in the service of the Institution."

Dr. Guggenbühl concludes by expressing his gratification that the Emperor Napoleon has announced his intention of founding an establishment in imitation of the Abendberg in Savoy, where the disease prevails extensively.—*Comptes-Rendus*, Vol. li. pp. 941—944.

EXCERPTA MINORA.

Pruritus Vulvæ.—The following decoction is recommended:—Bruised white hellebore, 20 parts; water, 750 parts; boil down to 500 parts, strain and employ as a lotion.—*Gazette des Hôpitaux*, No. 21.

Detection of Spots of Blood on a Rusty Instrument.—When it is desired to distinguish a spot of blood from one of rust, the spot may be a very small one or the one substance may be lying on the other. In both cases chemical reagents are of no avail. In a case of this kind MM. Robin and Lesueur have detected a very minute spot of blood, forming scarcely a varnish on a rusty instrument. By means of a scalpel and aided by a lens, they scraped off a small portion of the spot and let it fall in a drop of a solution of sulphate of soda, rendered slightly alkaline by the addition of a little caustic soda. They then examined it with a microscope, magnifying 520 diameters. At first the matter seemed quite homogeneous, but at the end of half-an-hour it was notably swollen, and in another half-hour it was found to consist of globules, which by moving the glasses over each other could be separated from each other. These globules were those of the blood of a mammal.—*Rev. Méd.* February, p. 178.

Detection of Feigned Mutism by Means of Electricity.—Dr. A. Hewson relates the case of a boy of about 14 years of age, who, for about a period of nine months, feigned mutism in the Philadelphia House of Refuge, although surrounded by other boys and persons bent upon detecting the imposture. For various reasons Dr. Hewson suspected an imposture which deceived everybody else, and determined to try and unmask it by means of electricity. Accordingly, he administered a strong shock of the induced current from a large magneto-electrical apparatus by means of moistened conductors applied over the larynx. The boy held out for at least twenty minutes, although the application was evidently very painful, when he called out in a suppressed tone "Enough!" and yet so completely had he deceived the authorities of the Refuge that they were convinced after all that the improvement which subsequently occurred was due to the remedial agency, or that the lad had hitherto been suffering under an illusion that he could not speak. Unfortunately for these explanations he afterwards confessed having feigned the dumbness.—*American Journal of Medical Science*, January, p. 113.

Reduction of Hernia under the Influence of Opium.—Dr.

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Doyle relates the case of a negro to whom he was called when in a state of prostration. He had been the subject of strangulated inguinal hernia for some days, and all the efforts of the taxis were unavailing. Stercoraceous vomiting had set in, and the patient seemed to be rapidly sinking, when two grains of opium were given him every two hours, three doses being administered. He then became stupid, his respiration being stertorous. His thighs were flexed, and he was covered up with blankets for an hour and twenty minutes. He then made a sudden start to move, and a sharp, snapping sound was heard. On examination, the tumour had disappeared.—*Ibid.*, January, p. 273.

Tapping in Ascites complicating Pregnancy.—When in cases of ascites complicating pregnancy, the fluid is drawn off rapidly in the usual way, uterine contraction is apt to occur, and premature labour may be thus induced. M. Pigeolet, of Brussels, recommends the perforation of the umbilical projection which in these cases generally exists, by means of a needle or capillary trocar, the fluid being allowed to flow away drop by drop, and the progress of the pregnancy remains uninterrupted. He relates a case in which this procedure was completely successful.—*Bull. de Thérap.* Vol. lx. p. 138.

FOREIGN CORRESPONDENCE.

GERMANY.

KISSINGEN, March 17.

THE LAST SEASON.

IN my first letter from Kissingen which was inserted in the *Medical Times and Gazette* for February 16, I promised to give you the statistics of this place for 1860, and an account of some diseases which are beneficially treated here, and which I did not then mention. The season of 1860 has been one of the most brilliant on record; we had 4990 patients, and 2427 occasional visitors; so that, compared with 1859, there was an increase of 1560 patients, and 256 visitors. Of these there were 3546 Germans and 1444 foreigners, amongst whom Russians and English greatly preponderated. In May we had 535, in June 1765, in July 1900, in August 723, in September 67; so that the number of patients was again largest in June and July. It is confidently believed that as soon as Kissingen is rendered easier of access by being connected by rail with Berlin, Dresden, Frankfort, and Paris, it will be still more frequented than it even is at present. Last week the Government granted permission for the opening of a railway from Kissingen to Schweinfurt; the laying down of the line is to be immediately taken in hand, and it will be finished by the end of 1862.

From Whitsuntide till September we had scarcely one dry day here; and this unusually wet weather exerted a rather unfavourable influence upon the sanitary condition of the place. Catarrhs of the bronchial tubes and the intestines, rheumatism, and other diseases occasioned by wet and cold, were prevalent, and many of the patients were, on account of the weather, in a state of hypochondriasis difficult to describe. But, nevertheless, the complaints did not take a severe form. The sudoriferous glands were in a state of great apathy, but the secretion of the kidneys was excited in an extraordinary degree; and more gravel, sand, mucus, and small calculi were passed with the urine last year, than has ever been known before. I now proceed to enumerate such morbid states of the system as may be cured here, and as I have not yet described.

Anæmia.—In cases of chlorosis and anæmia, the springs of Kissingen have a beneficial effect, provided the forms of this disease are not very severe. When the amount of globules is very much diminished, and the blood is in an hydræmic condition, the patients ought to be sent to Pyrmont, Driburg, Schwalbach, and other iron-springs; but in the milder forms of anæmia, the Racoczy, which contains iron, chloride of sodium, and carbonic acid, is very useful in improving the digestion and exciting a more healthy metamorphosis of matter. This is the case in patients suffering from anæmia after typhoid fever; in these, however, the brain and the whole nervous system are not unfrequently in such a state of irritation, that the carbonic acid proves too exciting for them; and then warm Pandur-baths, together with moderate exercise in the open-air, and nutritious food and wine, are prescribed.

Diabetes.—Cases of diabetes are generally sent to Karlsbad; but that the springs of Kissingen have also a salutary effect upon this terrible disease, is shown by the case of a patient who, in 1858, was under the care of Dr. Erhard, of this place. This patient had suffered for several years from periodical hæmorrhoidal disturbances and congestion of the liver; and in 1857 he was first attacked by diabetes, which in spite of the usual treatment, took such a severe form that the patient was given up. He was then ordered to drink Racoczy, more with the view to relieving thirst and constipation, than in expectation of any radical cure. After he had taken ten bottles, the amount of sugar was very much diminished, and after forty bottles had been used, no trace of sugar was to be found in the urine, while at the same time the general health was greatly improved. In the further progress of the treatment, the quantity of urine was much diminished, and at last reduced to its normal average. The patient was, in fact, perfectly cured, and has remained so up to this time. The cause of diabetes in this case was probably abdominal plethora and congestion of the liver. M. Schiff has proved that an increased quantity of blood in the liver is alone sufficient to cause diabetes, without any further pathological disturbance of the liver, the nervous system, or alteration in the chemical composition of the blood. The liver in which sugar is normally produced, forms, if congested, more sugar than is decomposed and consumed in the blood, so that the surplus is excreted in the urine. The curative effects of the Racoczy in cases of this kind is easily to be understood, as it relieves abdominal plethora and hyperæmia of the liver; while no beneficial effect can be expected of it in cases of diabetes which are combined with diseases of the brain, consumption, etc.

Nervous Diseases.—Many patients suffering from nervous complaints are sent here, but only a small proportion of them are likely to be benefited, as diseases of the mind, the brain, and the spinal cord cannot be cured by any mineral waters whatever. Still there are some nervous disorders in which much good may be accomplished by the Racoczy; thus, for instance, when the secretions and excretions are disturbed, and when the general health has not suffered too much. The mode of taking the waters is of the greatest consequence in cases of this kind, as different effects are produced if each of the waters is taken singly or in combination with others, whether warmer or cooler, with the full amount of iron and carbonic acid, or with only a part of them, etc. The most frequent nervous diseases observed here are hypochondriasis and hysteria. If the hypochondriasis is due to disturbed circulation in the portal system and the veins of the abdomen, the prognosis is favourable; but, if it arises from sexual disturbances, especially in consequence of syphilis, it often defies the most energetic and rational treatment. In hysteria, if it is accompanied with disturbances of nutrition, indigestion, and cardialgic symptoms, benefit may be expected. In cases where the sentient nerves are more especially the seat of the disease, warm brine-baths, together with the internal use of the Racoczy, are useful; but, if the motor sphere is affected, carbonic acid baths are the best remedy, while cold brine-baths, and washing of the whole body with Racoczy, answers best for psychical disturbances.

Kissingen should not be advised for patients suffering from diseases of the mind; but certain cases of neuralgia and paralysis may be benefited here. If neuralgia is dependent upon portal plethora, habitual constipation, hæmorrhoids, or rheumatism, the carbonic acid baths and the local application of the gas-douche are to be recommended. Cases of paralysis arising from apoplexy are often sent here, but only very few of them recover, and these are generally such in which a judicious application of electricity would effect a more rapid and certain cure. In atrophy, tubercle, and tumours of the brain, the symptoms grow worse when the springs are used.

Diseases of the Uro-Genital System.—Numerous cases of this kind are seen here every year. In the chronic form of Bright's disease complete cures have been effected; in chronic and purulent catarrh of the bladder, on the contrary, very little benefit results from the use of the waters; but gravel is abundantly evacuated, and those affections of the kidneys and bladder which are connected with it, are relieved.

Female Complaints.—Those diseases of women which are

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more especially benefited here are the chronic infarctus of the womb, chronic metritis, hypertrophy of the vaginal portion, with or without excoriations of the os, antroversion and retroversion, and incomplete prolapsus of the uterus, dysmenorrhœa, amenorrhœa, etc.; and in such cases baths of mother-liquor and mud-cataplasms are generally ordered in addition to the springs.

Diseases of the Respiratory Organs.—Chronic catarrh of the bronchial tubes, in patients suffering at the same time from hæmorrhoids and gout, who live well and take little exercise, and who are obliged to speak much, is much improved in consequence of the regulation of abdominal and portal circulation, which is brought about by the internal use of Racoczy. The same may be said of certain cases of emphysema. If consumption is connected with hæmorrhoids, bronchial catarrhs, hæmoptysis, indigestion, and hypochondriasis, the digestion is improved, the appetite re-established, and thus a better nutrition is induced, while, at the same time, sleeplessness is cured, and the mind becomes easier. Although the springs of Kissingen are no remedy for tuberculosis, they are most decidedly useful in certain symptoms, which, if they were to continue, would exert a very unfavourable influence upon the condition of the lungs. They are of service in middle-aged people; where caverns are not yet formed, the progress of the disease is slow and the digestion much impaired. Pleuritic exudations are absorbed if large quantities of the Maxbrunnen are taken, by which the diuresis is very much increased.

Diseases of the Skin.—Cases of eczema of the scrotum, which occur mostly amongst Jews,—herpes, acne, and other diseases,—not unfrequently find a cure here.

Diseases of the Heart.—If hypertrophy and dilatation of the ventricles, in consequence of valvular disease, are accompanied with much hyperæmia of the liver, the latter is relieved by the use of the waters. But if the disease is advanced—if dropsy has already set in, if dyspnœa, irregular pulse, cyanotic symptoms, etc., are observed, the patients had better remain at home. In all cases of this kind, however, great caution is necessary in prescribing the waters, as carbonic acid and iron often produce palpitations of the heart, congestion, and a tense and rapid pulse. It is therefore advisable to give the waters after the carbonic acid and iron have been removed from them, which is done either by gently heating the Racoczy, or letting it stand over night, and adding whey or bitter-water to it in the morning.

Diseases of the Organs of Special Sense.—Cases of inflammation of the conjunctiva, and congestion and inflammation of the choroidea are often seen here, and they improve a good deal if they are complicated with portal plethora and habitual constipation. Cases of incipient cataract have, up to the present time, never derived any benefit whatever; in these, as well as in patients suffering from deafness, the carbonic acid gas-douche is locally applied to the impaired organs; and many cures of deafness have been effected by this means.

Königsberg, March 16.

THE LATE MEETING OF GERMAN NATURALISTS AND PHYSICIANS.

The Medical life of this city has been deeply stirred by the annual meeting of the German Naturalists and Physicians, which last year took place for the first time in Königsberg. These meetings, which were once so pregnant with scientific results, and are still at present announced and take place with considerable *éclat*, have long ceased to bear any other fruit than this fresh awakening of scientific interest in men who live far from the great centres of science, or are lost in the routine of their daily work. Such an effect is, after all, not to be slighted, as in the long run it is not unfrequently father to many valuable contributions to the science of Medicine. An immediate scientific result, a union of eminent men on exciting Medical questions of the day, does not occur, and simply for this reason—that the best men generally shine by their absence. The meetings are therefore more of a social kind, enlivened by grand dinners and all sorts of amusements, to which some scientific conversation, *de omnibus et quibusdam aliis*, serves as a foil; and it is just this becoming acquainted with colleagues from all parts of Germany that gives the charm to these congregations. Last autumn it was especially Professor Virchow, now by general consent considered to be at the head of Medical science in this country, who, by his amiable disposition and the extraordinary powers and interest of his conversation, excited general attention and enthusiasm: It was amusiug to see how the coolness with which the arrival of the originator of cellular pathology was awaited, on his appearance was immediately upset, and the general feeling soon kindled into enthusiasm. This has already borne its fruits: and never in human memory has there been such terrible mortality as now amongst the frogs and rabbits in this neighbourhood, which have since then been sacrificed by thousands on the shrine of Physiological Science.

THE MEDICAL FACULTY.

In ordinary times the chief interest in Medical affairs, of course, centres in our University, and within the last few years the Medical Faculty has considerably increased in power, by acquiring two eminent Professors, namely, Dr. Wagner, one of the most talented pupils of Professor Langenbeck, of Berlin, for Clinical Surgery; and Dr. Jacobson for the newly-created chair of Clinical Ophthalmology. With regard to this latter appointment, many people were surprised that our University, which has otherwise, since the days of Kant, by no means had the reputation of being hasty in its progress or eager to acknowledge novelties, however important they may be, has actually gone ahead of other Prussian Universities. Dr. Jacobson, who has first described the retinitis syphilitica, is, in fact, with the exception of Dr. A. von Graefe, of Berlin, the only special clinical teacher in the "State of Intelligence," of this most important branch of Medicine. That Ophthalmology was thus constituted an independent science, is especially to be ascribed to the efforts of our far-sighted and influential Professor of Surgery, Dr. Wagner, who, although himself an eminent oculist, nevertheless despaired of the possibility of giving a complete course of lectures and practical instruction on Ophthalmology, as well as on Surgery proper. The progress which the diagnosis and treatment of diseases of the eye has made of late years, has been so rapid, that a separation from Surgery for clinical purposes appears, indeed, to be absolutely necessary. The exceedingly numerous cases of glaucoma, which until recently were left to themselves, can now, after the discoveries of A. von Graefe, be brought within reach of therapeutics; and it is not too much to demand that, if the Government once takes the education of Medical Practitioners into its own hand, and reserves to itself the right of giving the licence to practise, it is obliged to avert from its subjects the danger of falling into the hands of Surgeons, who are not up to the standard of science. A defective Medical and Surgical education must always be attended with gloomy results. A great row is made, if an unfortunate General Practitioner in the provinces does not take a correct view of a fresh dislocation or fracture, on account of the tumour, with which it is accompanied! Ought the blame to be less, if granulations of the conjunctiva are continually treated with irritant ointments or collyria, without considering whether the cornea has become ulcerated and perforated, or the iris fixed; and if diseases of the choroidea are left to themselves until such pathological changes have been brought about in that membrane as defy all treatment? If a fracture or dislocation is maltreated, the limb may still regain some degree of usefulness; while the results of mistakes in Ophthalmic Surgery are generally fatal to the sight. It is only when ophthalmology shall be as thoroughly studied in the Universities as Surgery proper is at present, that such mistakes can be avoided. It was on this principle that Professor Wagner excluded all cases of eye-diseases from his clinic, and thus compelled the Government to create a new special chair for that department. It is also to be hoped that a more stringent examination in ophthalmology will precede the granting of degrees than has hitherto been the case. It is very well to talk of the scientific ardour of students, who would not be likely to neglect such an interesting line of study as diseases of the eye; but it is well known that by far the greater number of them give their time only to such subjects as are thoroughly sifted in the examinations.

It is now three years since Professor Wagner came here, and the clinical instruction in Surgery proper has since then undergone the most marked and beneficial change; he has, in fact, cleaned the Augean stable which he found here with Herculean vigour. Pyæmia and gangrene were rife in the

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Surgical wards of the Hospital, and such was the disgraceful state of the building that the Insurance Societies were very reluctant to insure the lives of the House-Surgeons at their offices, and talked of the necessity of exacting a special premium for such policies at no distant time. Patients there were many, but the Professor who preceded Dr. Wagner knew not what to do with them. The extraordinary additions which have been made to operative Surgery within the last decennia, were as foreign to the authorities of the Hospital of Königsberg as they are to the Ashantees at present. To give an instance:—Dark rumours of resections of the joints having been performed at other Universities had reached the ear of the then Professor; but he scorned the idea of them, and proved by incontestable theoretical premises that such operations were an absurdity *per se*; it was impossible that fibrous tissue could perform the functions of bone! Of course the opinion of the Professor on such subjects was echoed by the Surgeons of the town and the province, and the list of amputations swelled to a very considerable extent. Soon after his arrival Professor Wagner astonished these gentlemen by performing a number of resections which were attended with the most striking success; and now, of course, no one ventures to repeat the objections which were formerly paraded with an unblushing air of superiority.

The torpidity and carelessness of our population, especially of the rural classes, about their ailments afforded a very favourable opportunity to Professor Wagner for showing his operative skill. If a tumour begins to develope itself in a patient belonging to the lower classes, old shepherds are the first to be consulted by them; and when these fail to give relief, the advice of the wives of the headsmen, who have a special reputation for therapeutical skill, is taken. Plasters and ointments which are ordered to soften or to divide the tumour, only serve to foster the growth of neoplasms by the irritation they produce, until they become of such an enormous size and so very troublesome that at last the sufferers are reluctantly compelled to consult a Surgeon. At the late meeting of the Naturalists and Physicians Professor Wagner showed some photographs of colossal tumours of the lower jaw which he had successfully removed; by only looking at them one was terrified on account of their enormity and filled with admiration for the boldness of the operator. A new Surgical Hospital is now in course of construction, which promises to become a model institution.

The death of Professor Rathke, which occurred on the eve of the day on which he, as President, was to open the meeting in this city of the German Naturalists and Physicians, has been shortly mentioned in the *Medical Times and Gazette* for October 20, 1860. This eminent embryologist died of apoplexy just at the moment when he had finished writing the speech with which he meant to inaugurate the meeting. His successor in the Chair of Anatomy is to be Dr. August Müller, of Berlin, who has a very high reputation as a teacher. His appointment was in so far remarkable as it was first almost unanimously demanded by the students of this University, who had for some time cast longing eyes upon that gentleman, in consequence of the brilliant accounts given them by their friends and colleagues who had followed his private anatomical demonstrations at Berlin. The Faculty soon yielded to their wish, the Government confirmed its choice, and Dr. Müller is now on his way to this city. In almost every branch of Medical instruction we are now provided with excellent teachers. It is so much the more important that this should be the case, as the population of Eastern Prussia is almost entirely dependent upon those Doctors who have been educated at Königsberg for the Medical advice they may require. Medical Practitioners from other parts of the kingdom are generally deterred from settling here by the disagreeable climate, the barrenness of the neighbourhood, and the exclusiveness of the inhabitants, who show a great aversion to strangers. The Medical Faculty of our University ought, therefore, to be always in the highest state of efficiency, or the interests of the community would grievously suffer.

HAMBURG, March 19.

THE PUBLIC HEALTH.

When the late terrible cold set in, the Doctors here fully expected that it would soon be followed by large numbers of cases of pneumonia, bronchitis, and pleurisy. The climate of Hamburg and of the country north of the Elbe much resembles that of England, and more especially that of the Eastern counties. The winter is generally wet and mild, and the summer moist and cool; so that the contrast of the last winter to those which had preceded it was very great. From the middle of December we had permanent snow and frost, and in January the thermometer was generally between + 8° and — 16° F., and even our famous stoves proved totally insufficient to warm us during this Arctic winter, which required Siberian clothing and housing to render it supportable. Being minus these items, we expected that the respiratory organs of the Hamburgers, who are only accustomed to a temperately cold and moist air, would terribly suffer; more especially as the frost was for some time accompanied with a dry and cutting east wind. But this reasoning proved fallacious, just as it did in other places. The state of the public health did not agree with our theories. Cases of pneumonia only occurred at the end of January, and therefore *post festum*. It is true that the Town Hospital was filled to overflowing; but this was in a great measure due to the Elbe having been entirely frozen over. In consequence of this circumstance, a large number of men were thrown out of employment, and, as the lower classes with us are very careless of the future, and seldom provide for a rainy day, all those who can make any decent show of the existence of valvular disease, rheumatism, neuralgia, etc., come, in bad times, to the Hospital, where they get warm beds, plenty of food, and are not obliged to do any work. Here they remain till the warm weather returns, when, like birds of passage, they go back to their old hovels. But, generally speaking, the sanitary condition of this town was very good; and there were fewer deaths in December and January than there had been in the previous months.

DR. TUNGEL ON PNEUMONIA.

Dr. Tüngel, one of the Physicians of the Town Hospital, lately read a paper before the Medical Society of this place, in which he gave his experience on certain facts connected with pneumonia. He said that this disease is most frequent here in the latter months of spring and autumn, as, out of nearly 200 cases, 90 occurred in April, May, November, and December. This proportion agrees with the accounts of the same disease in Vienna and Leipzig, where careful statistical tables have been drawn up, and would give the idea of a typical disease rather than of a merely local inflammatory process. Of 105 cases, 86 reached their acme on the ninth day; and Dr. Tüngel's observations perfectly coincide with those of Professor Traube, of Berlin, who found that pneumonia developes itself by sudden fits, as between two days of exacerbation there is one of intermission; and it is only on such a day that the solution of the pneumonia begins. The various methods of treatment, by venesection, calomel, digitalis, etc., have no influence whatever upon the course and duration of the disease, so that we can do nothing more than relieve troublesome, and combat dangerous symptoms. The treatment followed in the Town Hospital was, therefore, not at all violent; the *lancet* is totally disregarded and considered an antiquated instrument. If dyspnœa became very troublesome, and the stitches in the chest more than ordinarily painful, cupping and cataplasms were used, or digitalis and nitre was given. Small doses of Dover's powders repeatedly taken acted very beneficially; and if the solution was retarded, vesicants were resorted to with success. The diet was generally low, but after the solution had commenced, and if the appetite returned, more nutritious food was given. The proportion of deaths was about six per cent., as out of 181 cases of idiopathic pneumonia, eleven died. Pneumonia is to be looked upon as similar in its character to small-pox, scarlet-fever, and measles; and Medical men after having for a long time suffered from a *furor prescribendi*, now again begin to acknowlege the *vis medicatrix Naturæ*.

DR. MEYER ON CHANGES OF TEMPERATURE IN CERTAIN FORMS OF INSANITY.

The method of showing the increase and vacillations of temperature in the body in febrile diseases by the aid of the thermometer, which first gave definite results in the hands of Professors Traube and Wunderlich, has now been almost universally adopted in the German Hospitals; and, it is to be hoped, that this instrument will soon be as inseparable from the Doctors as the stethoscope is now. In our Hospital Dr. Meyer, the Physician to the lunatic wards, has for some time

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used the thermometer as a means of diagnosis in cases of mania, and has found that if the temperature is increased, and an accurate examination of the chest and the abdominal viscera does not show any disease in these parts, the maniacal excitement is almost certain to be due to inflammatory disease of the brain. In general progressive paralysis of the insane, if maniacal excitement occurs, the temperature is always increased, generally to above 100° F., and frequently to 104° and even more; while in those stages of the disease which are accompanied with depression, the temperature is for days and weeks below the normal average, and is sometimes as low as 85° F. In the ordinary mania the temperature is not increased, but, on the contrary, often diminished. Dr. Meyer distinguishes the different forms of mania and disorders of the mind in general, into direct and reflected alienations, as they are dependent either upon certain diseases of the brain, or the cerebrum is only temporarily deficient in its action in consequence of the influence of morbid states of other organs. The mania due to direct alienation is only a symptom of an exacerbation of cerebral inflammation (meningitis, encephalitis, etc.), and if in the mania of reflected alienation an increase of temperature is observed, the cause of this is to be sought elsewhere, in the organs of respiration, etc. It is well-known that the post-mortem examinations of patients who have died of general progressive paralysis, do not always satisfactorily show the inflammatory character of the brain disease. Dr. Meyer explains this by the circumstance that patients of this kind generally perish in the stage of depression, after they have been confined to their beds for a long time by other diseases, such as decubitus, etc., but he has quite recently found distinct effusions of pus into the pia mater of the convexity in two patients who died shortly after having been maniacal, and this could only be the result of meningitis.

THE NON-RESTRAINT SYSTEM IN THE TREATMENT OF THE INSANE.

The non-restraint system of treating the insane has, since Dr. Conolly's efforts, been so extensively followed in England, that it will probably be interesting to your readers to hear that the same system is carried out as much as possible in the lunatic wards of our Town Hospital; and I can testify that I have seldom seen asylums where the general behaviour of the inmates was of a better and more quiet character. A rigorous carrying out of this principle is scarcely possible at present, as the wards are very full, and there are scarcely any spare rooms; nevertheless, in the wards for male patients, whose number at present amounts to 225, the strait-waistcoat has not been resorted to for weeks past, and only in two or three cases lighter means of restraint have been employed. I hear that as soon as the new asylum is finished, Dr. Meyer purposes to abolish restraint altogether. The same Physician intends to visit England in a few weeks, for the purpose of inspecting the different asylums in your country.

GENERAL CORRESPONDENCE.

ON STARVATION.

LETTER FROM DR. P. MARTYN.

[To the Editor of the Medical Times and Gazette.]

SIR,—At the trial for alleged manslaughter by starvation at the late Assizes at Oxford, to which I was subpœnaed, and on which you commented in your Number of last week, it struck me that very little was known on the real effects of Starvation. As my experience enables me to add something to the amount and certainty of the knowledge of that cause of death, I here give it to you for publication.

Starvation may be total, or it may be protracted by insufficient or innutritious food. The occasions are shipwreck, or being cast away on barren shores, lost in woods or deserts, buried in mines or snow, suicide, sieges, and famines from the failure of crops. In the occasion last named, which should afford the largest opportunity of observation, the sufferers crowd to towns where they are relieved; or are attacked by typhoid fever, which becomes epidemic on these visitations; or die of dysentery induced by unsuitable, diseased, or putrid articles of food: so that deaths from simple uncomplicated starvation are very few; fewer still of these cases have been subjected to post-mortem examination; and not all of these few even have been made with sufficient care and minuteness. The symptoms are hunger, thirst, anæmia and want of animal heat, debility, emaciation, and confined bowels. Neither one, nor all of these, are distinctive of starvation. Hunger or craving occurs in many diseases; being out of the sight, and especially the scent of food, it is not always constant and distressing. The anxiety and efforts for escape frequently, and for long periods, suspend or supersede it; those accustomed to bulky food suffering more than others; and to appease the craving, or sinking in the stomach, as it is expressed, any article however unsuitable,—seaweed, wood, leather, earth, will be eaten. Thirst is incessant and irresistible, and any fluids will be taken to relieve it. Water very much prolongs life. I cannot resist giving here another instance of elective absorption, of which many are observed in the animal economy, which I have experienced myself, and which ought to be more known, namely, that in the absence of fresh water, when the body is dipped, or the clothes soaked in the sea, the thirst is relieved, and the parched mouth moistened almost as soon as by a drink of fresh water. The water is absorbed, the salt refused. Anæmia soon manifests itself by want of animal heat, pallid lips and skin, vertigo, singing in the ears, etc.; this and the debility forming the most depressing symptoms, affecting voice, gait, and all muscular power, as well as mind and feelings, to such a degree, that men have rejoiced at the cast that made their lot the sustenance of their famishing comrades. Emaciation is generally believed to be greater in disease than in starvation. Haller ("Opuscula Path.") examined the body of a suicide where fat an inch deep was found in the omentum; but this I suspect not to be an uncomplicated case. The emaciation in starvation is characteristic; it is a withering or shrivelling of the skin, which has lost its elasticity, giving to youth the aspect of age. The deepened colour of the skin, as well as the fetor sometimes named, may be owing to neglect of cleanliness. Imbecility may occur if the case is long protracted, and the brain small, as it does in other diseases. Death, when not hastened by disease, is slow and imperceptible; or it is precipitated by syncope from some sudden effort, or by exposure to severe cold. Delirium is not a symptom of starvation. I have seen much suffering and death from this cause more than once, have conversed with others who have seen more, and am acquainted with most that is written on the subject; and in no instance has delirium occurred. Men have been reduced to the utmost extremity of starvation, have dropped and died, and retained their intellect to the last. (Dr. Richardson's "Land Arctic Expedition," 1826; Captain Allen Gardiner, "Annual Register," 1852; *Quarterly Review*, 1816; *Naval Chronicle;* Donovan, *Dublin Medical Press*, 1848.) I have seen delirium in typhus interrupting starvation, and it has been produced in shipwrecks, when the sufferers have drunk wine, spirits, salt-water, and even their own urine, and died mad in consequence. (*Quarterly Review*, 1816; *Naval Chronicle*, v. 23.) This may have caused the mistake. Of the importance of a single symptom we had an instance in the trial above alluded to, where the presence of delirium, which is not a symptom of starvation, confirmed the Union Surgeon in the conclusion hastily and falsely adopted, that the emaciation, which is common to many diseases, was caused by insufficient food to the patient; because it is so stated in Dr. Taylor's book ("Medical Jurisprudence"), the latest English authority.

The post-mortem appearances are,—Emaciation; anæmia of every structure and organ; the blood is thin, watery, and deficient in fibrine; the large blood-vessels nearly empty; the heart is pale, thin and wasted, empty and collapsed. The full gall-bladder and tinted adjoining structures are common to many diseases, as are the thin and transparent intestines to all wasting diseases.—(Morgagni, Abercrombie, and others.) These may be found empty and contracted at any time in twenty hours after taking food; but there is one condition of the intestines diagnostic of starvation,—they are found not only contracted, but shrunken and diminished in size, shortened in length as well as in calibre, and like a mere cord, as if the canal was obliterated. The villi, also, of the mucous surface are found more or less diminished or fallen; the omentum has partly or wholly disappeared. (Bonetus, vol. ii.; Morgagni, vol. ii.; Sloan, *Medical Gazette*, 1836; Donovan, *Dublin Medical Press*, 1848.) The intestines, in fact, like other parts or organs of the body, dwindle away for

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want of exercise and use; and the omentum first,—it may be taken as the index of the food supply. This condition of the bowels, after their use has ceased, and that of the fœtus, before it has begun, present a resemblance that is striking and remarkable. I have seen this once in starvation from want of food, twice from total obstruction to its ingestion. To distinguish between these two, there must be found the obstruction either in the œsophagus or at the pylorus. Nearly the same appearances have been produced by long-continued vomiting (Morgagni), showing how injudicious it is to form an opinion without having the previous history of the case. Starvation is criminal as an act of suicide or of homicide; the latter could scarcely be committed without actual imprisonment from access to food; and to prove the crime would require the most unquestionable evidence.

I am, &c.

3, Thurloe-square. P. Martyn, M.D. Lond.

POST-MORTEM CONTRACTILITY.

Letter from Mr. Macnamara.

[To the Editor of the Medical Times and Gazette.]

Sir,—Through the medium of your valuable journal I should like to put on record the following most interesting case of contractility of the human heart, persisting fully twelve hours after death, and six and a-half after injection of the arteries with an arsenical solution (the solution employed being of the strength of one pound of arsenic to six gallons of water). The man, a Hindoo, aged 24 years, died in the Calcutta Police Hospital and was brought to the Medical College for dissection about 6 a.m., February 1, 1861. At 7 a.m. the body was injected. At 11 a.m. Professor Partridge's Prosector opened the thorax and abdomen for the purpose of dissecting the sympathetic nerve. At noon I by accident passed by, and on looking at the body I exclaimed "His heart is beating," and upon further inspection, I distinctly perceived a regular rhythmical, vermicular action of the right auricle and ventricle. The pericardium at the time was open, the heart fully exposed and lying to the left of its natural position. The heart's action although regular, was very weak, and slow. The left auricle was also in action, but the left ventricle was contracted and rigid and apparently motionless. The spontaneous contractions continued till about 12·45. The right side of the heart contracted, however, on the application of a stimulus, such as the point of a scalpel, for three quarters of an hour longer. I have been unable to ascertain exactly the period of the man's death, but it is certain his body was sent away from the Police Hospital as early as 6 a.m. And no body is ever sent thence for dissection without permitting several hours to elapse. The liver was in a state of cirrhosis, and there was general anasarca. The viscera generally were healthy. I am not aware that any case has yet been recorded in which the irritability of the human heart persisted for so long a period.

I am, &c.

James Macnamara, M.R.C.S. Eng., L.S.A. Lond.
Resident House Surgeon Med. Coll. Hosp.

Calcutta, February 9.

Mr. Wilde has been elected a Vice-President of the Royal Irish Academy.

The Royal Hospital for Incurables held its Annual Dinner on Tuesday last, at the London Tavern. Owing to the unexpected absence of the Duke of Wellington, the Common Sergeant presided, and made a most eloquent and powerful appeal in favour of this excellent Charity, which was responded to by subscriptions exceeding £1300

Crystal Palace.—The Gardens and Plants in the interior of the Palace are, for the time of year, in an unusually forward state, and give evidence of an early spring. The Fine Arts' Courts and the various other objects of attraction, have been entirely put in order for the coming season. The Exhibitors' Department—one of the most important in the establishment—is daily receiving considerable additions. The proximity of the International Exhibition of 1862 is already telling most favourably upon this important branch of the Company's revenue.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

Tuesday, March 19, 1861.

Dr. Copland, President, in the Chair.

Mr. Nunn read the following Report, by himself and Mr. Hulke, on Dr. Davies' specimen of

CANCER OF THE ŒSOPHAGUS.

The pharynx and œsophagus in the specimen under report having been already laid open, there is exposed an ulcerated surface of a somewhat diamond shape, the upper angle of which reaches to the anterior extremity of the arytæno-epiglottidean fold of mucous membrane. Below, the mucous membrane of the œsophagus, to the extent of an inch, is encroached upon. The breadth of the ulcer includes the whole width of the larynx. For the most part the ulcer is superficial, the edges are slightly raised, everted, and fungating; on the right side, however, the arytenoid cartilage has totally disappeared, the crico-thyroid articulation remaining perfect; on the left side the arytenoid cartilage is necrosed and fragmentary, the crico-thyroid articulation is destroyed, and a large portion of the back of the cricoid itself is necrosed and loose. The truncated extremity of the right superior laryngeal nerve may be seen forming part of the floor of the ulcer. This exposed portion of the nerve appears to have undergone infiltration of cancerous material, it being developed into a bulbous swelling, about the eighth of an inch in diameter. The corresponding superior laryngeal artery lies on the floor of the ulcer cleanly dissected, but not corroded by the ulcerative process. The left superior laryngeal nerve, although less involved, is somewhat enlarged at the point of its entrance into the cavity of the larynx. At the junction of the œsophagus with the pharynx, and upon the upper rings of the trachea, there lies a nodule of cancer, as large as an hazel-nut. Microscopic examination of the matters to be removed from the surface of the ulcer by scraping, and of sections of the fungating edges, discovered abundantly the presence of the nucleated cell growth, characteristic of (so-called) epithelial cancer.

Dr. Broadbent exhibited a specimen showing

HÆMORRHAGE INTO THE CEREBELLUM.

It was taken from the body of a woman, aged 20, who died in St. Mary's Hospital. The following is briefly the life history of the case:—About fourteen days before admission, early one morning, she was seized with headache (at the back of the head) and sickness. She continued at work for two days when the headache became much worse. The pain was continuous, but there were also paroxysmal exacerbations, the pain then shooting from behind forwards. She had also intolerance of light and of sound. When admitted the most prominent symptom, in addition to those related, was that her body was bent forward. There was no rigidity. She seemed to assume this position as the straight position was painful. The pulse and respiration were slow. There was no affection of the sight. She died suddenly a few days later. After death a clot, the size of a walnut, was found in the left hemisphere of the cerebellum, encroaching on, but not implicating the fourth ventricle.

Dr. Broadbent also exhibited a specimen of the parts concerned in

INGUINAL HERNIA REDUCED "EN MASSE."

The man had had the hernial tumour reduced by great force; but as the symptoms of strangulation continued he was sent to St. Mary's Hospital. The tumour could be pushed up the ring into the abdominal cavity, and as the symptoms of strangulation were not very severe, no operation was performed. He died of low pneumonia. After death it was found that the hernia had been reduced with the sac.

Mr. Hulke, Mr. Nunn, and Dr. Broadbent, were asked to furnish a further report on the case.

Dr. Dickinson exhibited a specimen of

CANCER OF THE ŒSOPHAGUS WHICH HAD OPENED INTO THE SUBCLAVIAN ARTERY.

The patient was admitted into St. George's Hospital for

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dysphagia. He was emaciated and sallow. There being no tumour in the throat, and no disease in the lungs, cancer of the œsophagus was diagnosed. One week after admission, during the night (2 a.m.), he got up to go to the water-closet. He fainted, and passed blood by stool. Early in the morning (8 a.m.) he vomited a little blood. He was able to dress himself, and also walked about the ward. He died the same morning. There was found malignant stricture of the œsophagus, and an opening below it, where the œsophagus was ulcerated, leading into the left subclavian artery. There was much blood in the stomach and intestines.

Dr. Graily Hewitt related the following particulars of

A CASE OF FATAL PARTURIENT HÆMORRHAGE IN A CAT.

He exhibited the cat, which had died from hæmorrhage attendant on parturition. The animal was believed to be old. One previous labour had been tedious. One kitten was born February 24, and during the day two more. The cat was found dead the next morning, having during the night lost a considerable quantity of blood. Three more kittens, one partially born were found in the uterus. There was much engorgement of the uterine vessels on one side, the placenta was partially attached; no blood in the uterus. The case was analogous, the author believed, to cases of parturient hæmorrhage, which were observed in the human female and which were known to be more frequent in old than in young subjects. The uterine fibres in this case were free from fatty transformation, but the walls of the uterus appeared to be too thin, and there was a large accumulation of fat in the pelvis and mesentery.

Mr. Swete then showed

A TUMOUR ATTACHED TO THE RIGHT OVARY.

Eight or nine months ago he attended the patient for tumour in the right loin, which he believed was ovarian. She had subsequently ascites, so that it was then impossible to make out the tumour. After death it was found to be a fibrous tumour, attached to the right ovary. It had contracted extensive adhesions to the intestines.

Mr. Henry Thompson exhibited a specimen of

IMPACTED CALCULUS IN A SAC OF THE BLADDER.

He exhibited this preparation as an illustration of one shown by him at the previous meeting, during the discussion on which some doubt had been thrown on the existence of sacculi in the base of the bladder, or near to its neck. He therefore brought this forward as an undoubted example, and stated that, although by far the most common situation was the sides and upper part of the organ, occasionally one was found close behind the prostate. This patient had been long the subject of urinary disease, and after death a small sac was found, situated three-quarters of an inch behind the centre of the prostate, and in all respects like those seen elsewhere, lined with mucous membrane, and having a small communicating orifice with the bladder. In it was situated a urinary calculus about the size of a horse-bean,—one wholly different from the prostatic calculus, and apparently of uric acid. He adverted also to the fact that one example of a sac existing in this situation had been shown to the Society in 1854, by Mr. Shaw. (See "Transactions," vol. v. p. 199.)

Mr. Coulson, referring to the specimen exhibited at the previous meeting, still adhered to the opinion he had expressed at the last meeting of the Society, that it was doubtful whether the stone was encysted near the prostate. He believed it had been near the entrance of the ureter.

Mr. Spencer Wells referred to a specimen of calculus which he exhibited during a previous Session. It had passed into the rectum through an abscess. He had no doubt that in this case the stone had been sacculated in the bladder.

Mr. Canton exhibited

A LARYNX FROM A MAN WHO DIED AT THE AGE OF ONE HUNDRED AND THREE.

He brought forward the specimen to show that certain changes, as calcification of cartilages, etc., were not merely the changes of old age, but indicated a general condition which might occur in early age, and which was associated with definite changes in other tissues. The laryngeal cartilages in this specimen were very little calcified. The cornea had undergone no change, and the heart was free from fatty degeneration.

Mr. Canton also exhibited numerous other specimens of

CALCIFICATION OF THE LARYNX,

showing that extensive change might occur *before* middle age. He believed that the first stage of the process was fatty degeneration, and that subsequently calcareous matter was deposited.

In reply to Dr. Crisp, Mr. Canton stated that of the arteries only a small part of the thoracic aorta had been sent to him. It, as well as the coronary arteries, was free from any degenerative change.

Dr. Crisp differed from Mr. Canton in the view held, that calcification was a result of fatty degeneration. He believed that calcification followed on congestion, and local inflammatory action. He believed, too, that ossification of the coats of the arteries should be considered not so much a disease as a conservative act of Nature, in association with changes in the secreting organs. Neither did he think that arcus senilis could be looked on as a sign of fatty degeneration of the heart.

Dr. Gibbs believed that the earthy matter deposited in the degenerated tissues of the young consisted principally of the carbonate of lime, whilst in what might be called the transformation of tissue in the aged, it consisted of the phosphate of lime.

Mr. Canton stated that the microscope would settle the question as to the association of fatty degeneration and the deposition of calcareous matter. He believed that it was capable of demonstration that such changes took place. He believed that a man might live on for years with arcus senilis, associated with fatty degeneration of the heart, as the whole of the system being, as it were, reduced to the same condition, there was no great strain on any particular part of the arterial system. He believed that a person who had arcus senilis and a sound heart was in a worse condition as regards chance of life than a person who had the arcus and fatty heart.

Mr. Bryant exhibited a specimen of

CYSTIC SARCOMA OF THE BREAST.

It was removed from a woman, aged 20. It had been noticed three years. About a year and a-half ago the tumour was about the size of an egg, and was developed in the breast gland; lately, it grew rapidly. It was globular, measured twenty-three inches round, and gave a sense of fluctuation. Mr. Bryant tapped it and drew off two and a-half pints of bloody fluid It soon enlarged again, and therefore Mr. Bryant removed it. It was a good specimen of cystic sarcoma.

Mr. Ballard exhibited a

MEMBRANOUS CAST OF THE LARYNX EXPELLED IN COUGHING.

The patient, a young woman, took cold, became hoarse, and suffered from cough and dyspnœa. When Mr. Ballard saw her there was no redness or inflammatory swelling in the throat, but on one tonsil there was an œdematous patch. A few days later she coughed up a little blood, and then the cast which he exhibited. He had treated the case by the application of leeches, and the administration of salines and antimony. The patient recovered rapidly, and much sooner, he believed, than she would have done if she had been treated by stimulants.

Mr. Spencer Wells exhibited an

OVARIAN CYST WHICH HAD PROVED FATAL BY SPONTANEOUS RUPTURE.

The patient was a married woman, 53 years of age, who was admitted to the Samaritan Hospital last month with a large abdominal tumour surrounded by ascitic fluid. Uterine hæmorrhage and other symptoms led to the belief that it might be a uterine tumour; but examination with the uterine sound pointed to its ovarian nature. Partly to clear up the diagnosis, and partly to afford temporary relief to the urgent symptoms produced by abdominal distension, Mr. Wells removed eight pints of ascitic fluid by tapping on February 25. The patient remained well during the night and following day, but on the second night she became suddenly restless, hysterical, and sick. On the third day the abdomen was found nearly as large as before the tapping, and there was general fluctuation, with rapid, feeble pulse, and all the symptoms of a low form of peritonitis, which continued until the sixth day after tapping, when she died. On the evening before her death a catheter was passed through the cicatrix

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of the puncture, and three pints of turbid serum, containing flakes of lymph, were evacuated. On post-mortem examination a considerable quantity of similar turbid serum was found surrounding the compound ovarian cyst exhibited to the Society. Extensive peritonitis was shown by abundant flakes of adhering lymph over the surface of the membrane. A large cyst on the lower and posterior surface of the tumour had given way, and its contents had escaped into the peritoneal cavity, the thicker portions having gravitated to the pelvis, which was filled by a mixture of gelatinous ovarian matter, serum, and some blood.

Mr. Spencer Wells also exhibited an

OVARIAN CYST SUCCESSFULLY REMOVED BY OVARIOTOMY

on the 9th inst. from a single lady, twenty-two years of age. The tumour had been of several years' growth. Iodine had been injected fourteen months before by Dr. Grimsdale, of Liverpool. The injected cyst had not re-filled, but other cysts had grown, and ovariotomy was decided on as the only possible means of cure. Mr. Wells performed the operation at Liverpool on the 9th inst. There were no adhesions except to a piece of omentum, which was easily separated. The peduncle was fixed between the lips of the wound, and the case had progressed most favourably. Mr. Wells read a letter from Dr. Grimsdale, written the day before this meeting, stating that the "pulse is about 90. She sleeps and eats well, and is in capital spirits. Throughout there has been a wonderful absence of anything like a bad symptom." The cyst with its contents had weighed about sixteen pounds. The most interesting part of it was a mass about the size of the fist, which appeared to be the thickened and corrugated wall of the cyst which had been injected with iodine. The structure of this portion was simply fibrous. Mr. Wells added that the two specimens he had exhibited were not the first examples he had brought before the Society to show the dangers of palliative treatment, and the success following a bolder course. In one week he had had three ovarian cases in the Samaritan Hospital. In one he performed ovariotomy, and the patient recovered. In the second he injected iodine, and she also recovered. The third was simply tapped; but inflammation of the lining membrane of the emptied cyst came on, and the patient died of exhaustive fever. Possibly the removal of the ascitic fluid, in the first case now brought before the Society, might have hastened the fatal result, by leaving a thin cyst unsupported, and this risk should be considered in practice. The second case made five in succession in which he (Mr. Wells) had recently performed ovariotomy with complete success. The total number of his operations had been twenty-two, and the recoveries fifteen.

Mr. Coulson asked what had been the effects of previous tappings upon the result of ovariotomy in Mr. Wells's practice.

Mr. Wells replied that he had only operated in one case where tapping had not been performed. All the other patients had been tapped, some several times; and one had been twice injected with iodine.

Dr. Gibb exhibited, for Mr. Baker Brown,

A POLYCYSTIC TUMOUR OF THE RIGHT, AND A FIBROUS TUMOUR OF THE LEFT, OVARY.

These were removed by Mr. Brown from a single female, aged 48 years, who had been subject to enlargement of the abdomen for only one year. The catamenia were regular up to September last. Ovariotomy was performed on March 2, when a large polycystic tumour of the right ovary was removed, and a fibrous tumour of the left afterwards. The abdominal incision was closed by silver wire sutures. The clamp was removed on the second day, and the ligature on the eighth. The wound has almost entirely healed. This makes the ninth example of ovariotomy done at the Surgical Home for Women, and is the sixth successful case.

An "Oldest Inhabitant."—The Registrar-General recorded last month the death of a woman in Scotland—at Perth, where she was born—aged 105. She was the eldest of twenty children, born of the same parents; and twenty years, to a day, after her birth her youngest brother and sister (twins) were born.

EPIDEMIOLOGICAL SOCIETY.

Monday, March 4, 1861.

Dr. Babington, President, in the Chair.

Dr. M'William read a Paper, by Dr. Kinnear, Deputy-Inspector-General of the Royal Naval Hospital, Port Royal, Jamaica, entitled,

REMARKS ON THE EPIDEMIC OF YELLOW FEVER BY WHICH PORT ROYAL WAS LATELY VISITED.

Dr. Kinnear, after giving an account of the events connected with the *Icarus* before she arrived with yellow fever at Port Royal, from Belize, and of the subsequent infection with the same disease of the *Imaum* and the *Hydra*, all of which were brought forth in full detail by Dr. Bryson in his paper read at the previous meeting, stated that, on the 26th of October last, when many cases had been received into the Hospital from the infected ships, a patient who had previously been admitted for ulcer of the leg was taken with yellow fever, and died with black vomit on the 3rd, adding another to the many proofs of the infectious character of yellow fever which this epidemy had already furnished. Dr. Kinnear, after giving in detail the number of daily admissions from the infected ships, and the results up to a certain period, continued:—"I have hitherto had little faith in the infectious nature of yellow fever; but in the recent epidemic it was undoubtedly infectious in the highest degree. People who merely went on board the *Icarus*, without going below, were struck down within a period varying from thirty-six hours to four days after their visit to this ill-fated vessel. On their arrival at the Hospital many were already stamped with the brand of death: their countenance of a copper colour; the eyes muddy and bleared; the tongue red at the edges and tip. The heat of the skin was so intense that it imparted a sensation of burning to one's fingers which did not leave them for some time. After febrile action had continued for from twenty-four to forty-eight hours, it would subside, and extreme lassitude followed. Collapse then set in, the urine became albuminous, and hæmorrhage from the mouth, the nose, and the bowels, terminated life. Black vomit hurried on the fatal termination, and sometimes head symptoms with fierce delirium preceded death." Dr. Kinnear, in addition to the many positive proofs of the infectious nature of the epidemic, adduced as a strong negative evidence in favour of the same view, the fact of the *Kingston*, with upwards of forty of the *Imaum's* crew, having come in from sea while the fever was raging in the ships and in the Hospital, and that notwithstanding she remained a night or two in Port Royal, when she had no intercourse with the ships or the Hospital, and was sent to the head of the harbour, five miles distant, continuing throughout the epidemy with the crew perfectly healthy. The *Gladiator* also came into Port Royal when the fever was raging, but had no communication with the sickly ships or the Hospital, and departed. So far as Dr. Kinnear's knowledge enabled him to speak, she escaped.

The principal Medical men of Kingston visited the sick in the Hospital, and all concurred in the infectious and intractable character of the fever.

Dr. McWilliam observed that as this epidemy had been fully discussed when Dr. Bryson's paper was read, it was unnecessary to go over the same ground. He could not, however, but sympathise, and he felt the meeting would do the same, with the Medical officers who had been engaged in combating this severe epidemy. He had reason to know that Mr. J. D. McDonald, Surgeon, Dr. Maclagan and Mr. McCombie, Assistant-Surgeons (the two last of whom unfortunately fell victims to the disease), of the *Icarus*; Mr. Seccombe, Surgeon of the *Imaum*; Mr. James Lilburn, Surgeon, and Mr. J. C. Grigg, Assistant-Surgeon, of the *Hydra*; Mr. McDonogh, Surgeon, Mr. Samuel Bamfield, and Mr. J. Bishop, Assistant-Surgeons, of the *Barracouta*; and Dr. Kinnear, Deputy-Inspector-General, Mr. Heath, Surgeon, and Messrs. Ridings and Barry, Assistant-Surgeons, of Port Royal Hospital, had performed their arduous and responsible duties in a manner that entitled them to the gratitude of their country—a fact which he trusted would not remain unnoticed in the proper quarter.

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Dr. Richardson then read a paper entitled

FURTHER OBSERVATIONS ON SCARLET FEVER.

He commenced by stating, that precisely eight years ago, viz. on March 7, 1853, he had communicated a paper on scarlet fever to the Society, in which he had endeavoured to establish the following propositions:—First. That scarlet fever in whatever form or type, appearing in individual cases, is a single disease in its universal character, and should have only one name. Secondly. That after the first ten years of life, the liability of an individual to an attack of scarlet fever lessens in proportion to his increase of years. Thirdly. That scarlet fever pays no respect to either sex, but attacks more or fewer of males or of females in a district or country, according to the relative differences in the number of the sexes in those districts or countries. Fourthly. That the seasons influence the spread of scarlet fever; the disease being most prevalent in the last three months of the year; least so in the months of April, May, and June. Fifthly. That scarlet fever may occur twice in the same person; that such recurrences are very rare, and rarely, as far as can yet be ascertained, fatal. Sixthly. That the mortality of scarlet fever is greatest in children under ten years of age; is equal in the sexes; is highest in the last three months of the year; is, as a general rule, twice as great in towns as in rural districts; and is second in extent only to typhus fever of all the ordinary epidemic diseases. Since the date in question, the author had from time to time recast these propositions, only, however, to confirm their general correctness. They had also been confirmed by other and independent observers, but there were still many points which the previous paper had left untouched, and to which the present paper would now be devoted. The points brought forward on this occasion for discussion were—1. The reasons why season influences the spread of scarlet fever. 2. The cause of the difference of types of the disease. 3. The connection of scarlet fever with acute rheumatic fever. 4. The chemical pathology of scarlet fever. 5. The poison of scarlet fever in relation to its propagation and mode of action. In considering the first of these propositions, the author mentioned the effects of temperature, barometrical pressure, amount of rain, rate of movement, and the electrical condition of the atmosphere. Having gone minutely into these points, he deduced that the inquiry showed but few facts of value bearing on the effects of special atmospherical changes on scarlet fever. It was worthy of remark, certainly, that during a period of eighty-four days, when in one locality there was an unequal mortality of sixteen, there were fifty-seven days of positive electricity; while in five days, during which the rate of mortality was forty-one per week, there were thirty-two days in which there was no electrical manifestation. It might be inferred hereupon, that the absence of electrical manifestation was at least coincident with a high mortality, and, on the contrary, that the presence of positive electricity was coincident with a low mortality. But when we see again a week of extreme high mortality (188), during which we have two days of positive electricity, and a week of extreme low mortality (8), during which electricity was absent on five days, we can but accept the facts which seem to have an affirmative meaning, in the light of coincidences, not as cause and effect. Yet it may be that in the future some relationship between the presence of electricity and a low mortality from this disease will be traced; for it is possible that, while electricity in no way interferes with the spread of the contagion of scarlet fever it produces modification in the effects of the poison on the animal organism. But if there is only this one finger pointing affirmatively towards the relationship of meteorological conditions and scarlet fever, there is a large amount of negative evidence in the statistics given. We see, for example, that with equal mortality, the most opposite conditions of temperature may be presented; but the most interesting observation is that in reference to the movement of the air. Assuming that the disorder was propagated by means of a volatile poison, it is obvious that such poison is limited in the range of action, or, at all events, that it is not influenced by the mechanical vibrations of the atmospheric sea. In a dead calm the mortality may, in one month, be sixteen, and in another week with a current of air passing over the infected spot, at the rate of 207 miles per day, the mortality shall be the same; while again, with a week of extraordinary high mortality—188—a current of air may be sweeping over the home of the disease at the rate of 1010 miles. As the cause of the difference of type in scarlet fever, Dr. Richardson endeavoured, by excluding various possible causes, to arrive at the actual cause. His results in this direction were summed up in the following quotation:—"If we admit, and we are bound to admit as much, that the variety of type of scarlet fever is not dependent on differences of poison, not on meteorological condition, locality, physical condition of the patient at the time of infection, age, nor hereditary taint, where shall we look for an explanation of the singular phenomena that of two children attacked at the same time, the one may be comparatively well, at the period when the other lies dead, each event encircled in the period of a few days? The question is one of the most profound and important in the field of Medical inquiry. At this stage of our knowledge we must leave it, but with one supposition,—that there is in the organism itself a directing cause which modifies the violence of the poison, or intensifies its action; a cause allied to that agency which prevents in nearly every case a repetition of the disease altogether, in those who have passed through its stages, whether gently or severely." The section on the connexion of scarlet fever and rheumatic fever, were traced out with considerable detail; the author not only giving facts from his own observation, but quoting from others who had seen the same. Dr. Golding Bird, Dr. Kelso, and Dr. Ross were thus specially cited. Analogy was also instituted as to the relation of this complicated affection, and the epidemic called "Dengué" in Southern America. In treating on the chemical pathology of scarlet fever, Dr. Richardson classed the disease as belonging essentially to the inflammatory group of diseases. In this respect he differed from Franz Simon, who had stated that the disorder belonged to the same class as typhus and typhoid fevers; the blood presenting evidence of relative deficiency of fibrine, on comparison of the fibrine with the blood corpuscles—hypinosis. This view of Simon, resting as it did upon four analyses by Andral and Gavarret, was shown to be not only incomplete, but incorrect. Under the last head, the Nature and Propagation of the Poison of Scarlet Fever, the author dwelt, first, on the physical character of the poison, urging that the poison was not a gas, nor volatile, but a substantive solid thing; next he urged that the poison was thrown off by the lungs or skin, probably with epithelium; thirdly, that poison introduced into the body of the healthy subject, by interfering with the natural zymotic process going on in the body, leads to the formation of a lower product of the fermentative process than carbonic acid; and that the new product, an oxyacid, carried over by the systemic blood, is the cause of all the acute symptoms. Having pointed out that this secondary poison would necessarily be detected in the excretions of patients, and explained some modifications of his previously expressed views on zymosis, Dr. Richardson left the Paper to the discussion of the Society.

Dr. Babington observed with reference to the protective power of an attack of scarlet fever against a second attack, that second attacks had not unfrequently occurred in his practice, but that the cases of second attack were considerably modified in severity. The protection bestowed by an attack of scarlet fever, against a recurrence of the disorder was far less than in the case of any of the other exanthemata—measles or small pox for instance. He considered it desirable that in investigating this disease meteorological inquiry should be pursued farther. The direction, as well as the force, of the wind, should be ascertained, and also the amount of ozone in the atmosphere. As a general rule Dr. Babington had found that when the disease prevailed in a family, the type of the disease was the same in the family throughout; and the same rule appeared to him to hold good in large institutions when invaded by the malady. Few diseases were so little amenable to treatment as scarlet fever in its severe form.

Dr. Greenhow's experience had taught him to believe that the type of scarlet fever varies much in different epidemics. In one epidemic he had seen 100 cases, and 1 in 3 died; again, in the same town, and the same population, during another epidemic, 2 only in 120 cases had proved fatal. He had observed also, that scarlet fever attacks certain families severely, and others mildly. In some epidemics the mortality is greatest among males, in others, among females. With regard to the alleged greater prevalence of the disease in large towns, Dr. Greenhow had found it as rife in country

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districts as in towns. He considered, moreover, that scarlet fever rose and spread independently of what was called sanitary condition, and that, not unfrequently, local authorities had undeservedly incurred odium on account of scarlet fever breaking out in towns. Rigorous scrutiny, had, in no small number of such cases, detected the true cause, which was the introduction of the disease into localities which had been for many years free from it, and when, consequently, the greater proportion of the population was unprotected by previous attacks.

Dr. Camps thought that the question of malignity of type in scarlet fever was that of degree of the same type, not a difference of type. He differed from Simon as to his views of the nature of scarlet fever; but, with respect to the essential character of the disease, he was of opinion that further inquiry was necessary. He was not reconciled to the opinion of Dr. Richardson, that the poison of scarlet fever was a solid, substantive thing.

Dr. McWilliam said it was gratifying to find a man like Dr. Richardson taking a grasp of the nature of scarlet fever, after investigating this subject in a philosophical spirit. Dr. Richardson had shown, in the cases he had cited, that transmission from person to person was really the mode in which the disease was propagated, and with which locality and sanitary condition appeared to have little, if anything at all, to do. Meteorology had as yet done little to solve the problem. As to what conditions were most favourable to the maintenance of the disease, or to its modifications of severity and type, one important meteorological element had not been noted among others which had been so carefully observed and recorded in Dr. Richardson's paper, and that was the temperature of the dew point. The hygrometric condition of the atmosphere he believed to influence disease in a degree second only to that of its temperature.

Dr. Richardson having replied to the various speakers, the meeting adjourned at ten o'clock.

WESTERN MEDICAL AND SURGICAL SOCIETY.

Friday, March 15, 1861.

Mr. A. Leggatt, Vice-President, in the Chair.

A Paper, by Dr. Barclay, was read, on

HYSTERICAL MANIA.

He commenced by alluding to the vagueness which attached to all cases of mania, especially that form under notice. He stated that all mental phenomena occurring in cases of actual disease, as in inflammation of the brain, or change in the character of the blood, were readily assigned to causes of somatic origin; and it was not difficult to conclude that similar phenomena occurring in mental alienation must owe their origin to causes of a like nature; but such an interpretation was difficult to prove, from the very character of the symptoms. However easy it may be to refer to its proper group, or its proper lesion, any case of ordinary insanity, still, in cases of hysterical mania, it is impossible to associate the symptoms with any disease of nerve structure. Independently of its connexion with perverted uterine function, hysterical mania may be considered as an anomalous condition of the nervous system, with which mental phenomena are often mixed up,—the symptoms being too general to be considered as dependent on irritation of local portions of the cord or nervous centres, though in a few instances the phenomena of hysteria are manifested in nerves which are not usually the seat of common sensibility, as globus hystericus, and palpitations. In the present case, the patient was unmarried, aged 27, and for the last ten years her symptoms had been fostered by the improper and indiscreet conduct of her companion. At first slight cough, then paralysis, fits, convulsions, and finally mania followed, in which religious delusions were prominent. These symptoms soon assumed a periodic character, and were readily induced by any slight exertion. Last summer severe vomiting occurred, and an increased liability to convulsive seizures. The catamenia were regular, and her general health good. When the author first saw the case, there was slight paralysis of the legs and of the right arm, which the author readily referred to an hysterical origin, though considerable doubt was manifested by her other Medical attendant. If any doubt as to the nature of the attacks existed, it readily was removed when the symptoms of hysterical insanity commenced. These occurred in paroxysms, in which delusions were present, and the attacks terminated by an attack of hysterical convulsions. The expression of the face, and the language, were so characteristic of mania, that the author at first feared their dependence on it, and it was only after a careful examination of the case in all its bearings that all doubt was removed. In his comments on the case Dr. Barclay stated that he considered the paralysis as a permanent delusion, and really dependent on some perversion of the nervous matter, and that it was only on such a view we could hope to do our patient any good. In our treatment sympathy and moral encouragement are elements of success, and though we deny that hysteria is related to mental aberration, yet there are some points of resemblance between them in the curative power of mental agencies. One of the chief difficulties in the use of sympathy was its proper direction and handling, as, indiscreetly used, it tended to increase the disease. There was great difficulty, too, in convincing the patient she could exercise the voluntary power which seemed to her lost, and that by dwelling on the symptoms she only increases the manifestation of the disease, and then there is the idea entertained by the patient that she is regarded as a sham and an impostor, which must be hateful to a right-minded person. These difficulties make argument of no avail, and render any hope of cure the more distant.

HARVEIAN SOCIETY OF LONDON.

Thursday, March 21, 1861.

Dr. Sieveking, President, in the Chair.

The President directed the attention of the Society to a case of

DISEASE OF THE KIDNEY,

which had occurred in a female. The disease dated back four years. No dropsy existed. The kidneys were converted into cysts, little of the substance remaining. One ovary had two small cysts of the unilocular form. The lungs were congested at the apices. There was also disorganisation of the valves of the aorta. The woman had convulsions, became insensible, and shortly after died.

Mr. Ballard exhibited a fibrinous coat of the

RIMA GLOTTIDIS,

which had been coughed up by a strumous girl; she had also at times brought up, by the effort of coughing, a little blood. On the left tonsil there had been a small patch. The case was regarded as one of laryngitis.

Mr. Hornidge then read the Paper of the evening,

ON THE ACTION OF OZONE ON ORGANIC COMPOUNDS,

the effect of which, when taken into the system in large doses, was stated by the Author to produce hyperæmia, the blood is darkened, and finally becomes black. It might be used as a disinfectant, and has the power of destroying sulphuretted hydrogen. It might be introduced with advantage into the sick-room. Ozone is most abundant in mountainous districts and by the sea-side. Its action on organic substances is oxidation, and it is said also to play an important part in promoting nutrition.

The subject was illustrated by a series of well-conducted experiments, and at the close of the Paper a vote of thanks was unanimously accorded to the Author.

The President alluded to the effect which might be produced by ozone on epidemic diseases; observing that it might be a question how far consumption in the Hebrides might be owing to the presence of this agent in great abundance.

Dr. Saunderson then remarked upon the uncertainty of the quantity of ozone in different localities. In large towns there was an absence of it, which might in some degree, in the opinion of Dr. Saunderson, account for the depressing influence of town residence. Dr. Saunderson had observed that the quantity of ozone was very large at Geneva, and also at Chamouni.

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MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—At the Comitia Majora, held on Monday, March 25, the following gentlemen, having undergone the necessary Examination, were duly admitted Members of the College:—

Broadbent, William Henry, M.D., Upper Seymour-street
Corfe, George, M.D., Nottingham-terrace, Regent's-park
Rogers, John Henry, East Grinstead, Sussex
Webb, Allan, M.D., Calcutta.

The following gentlemen, formerly Extra-Licentiates of the College, were also admitted Members:—

Bull, Martin Meggison, Jersey
Lancaster, Joseph, Clifton
Roberts, John, M.D., Salisbury
Walsh, James, H.M.S. *Bogue*
Witt, Charles, Spring-gardens.

At the same Comitia Andrew Wynter, M.D., of Colehernecourt, Old Brompton, was admitted a Member, having been previously elected under a Temporary Bye-Law (now expired).

Also, at this Comitia, the following gentlemen, having undergone the necessary Examination, and satisfied the College of their proficiency in the Science and Practice of Medicine and Midwifery, were duly admitted to Practise Physic as Licentiates of the College:—

Blenkinsop, William Henry, Binfield, Berkshire
Downing, Samuel Dawson, Birkenhead
Pyburn, James, Newcastle-upon-Tyne
Slayter, William Bruce, Westminster Hospital
Steele, Charles, Clifton.

At the Comitia Majora Ordinaria, held on Monday, March 25, Thomas Mayo, M.D., F.R.S., was re-elected President of the College for the ensuing year.

At the same Comitia the following gentlemen were chosen Members of the Council of the College:—

Bennett, J. Risdon, M.D. | Jeaffreson, Henry, M.D.
Copland, James, M.D. | Watson, Thomas, M.D.

ROYAL COLLEGE OF SURGEONS.—The following Members of the College, having undergone the necessary Examinations, were admitted Licentiates in Midwifery at a meeting of the Board on the 20th inst., viz:—

Name.	Residence.	Date of Diploma.
Colah, M. Beramjee	Bombay	January 30, 1861.
Cumpstone, William	Market Raisen, Lincolns.	April 5, 1858
De Negri, Athenodore	London	January 30, 1861
Griffiths, F. Thomas	Sheffield	January 31, 1861
Harris, William	Newport, Tipperary	March 10, 1854
Kerswill, George	St. Germans, Cornwall	November 13, 1860
Thompson, Daniel Robert	Madras	January 31, 1861
Thomason, W. James	St. Bartholomew's Hosp.	January 31, 1861
Travers, William	Charing-cross Hospital	April 17, 1860
Tanner, Mark Batt	Exeter, Devon	July 31, 1860
Ward, Henry	Diss, Norfolk	November 14, 1860

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in Classics and Mathematics on Tuesday and Wednesday, March 19 and 20:—

Adams, William, Rochester
Andrews, A. J., 40, Trinity-square
Barrett, J. W.
Bate, George Paddock
Bell, Thomas Ernest, Deeping
Bloxham, John Astley, London
Casson, J. Hornsey, Derbyshire
Court, Josiah, Warwick
Dwelly, H. J., Guy's Hospital
Farr, Arthur John, Newport
Forster, Edward Wood, Newcastle-on-Tyne
Freeman, Henry William, Bideford
Guy, John, Workington
Hume, Frederick H., Bath-road, Hounslow
Lawe, George May, Lynn Regis
Lawrence, John, Bristol
Little, William, Cirencester
Locking, Benjamin, Hull
Lowndes, Frederick, Liverpool
Lyddall, Wykeham H., St. Mary's Hospital
Mallory, H. S., Stockport
Maybury, Augustus Constable,
McNair, Frederick, Guy's Hospital
Morris, Joseph, Studley, Warwick
Munden, Charles, Ilminster
Muriel, George John, Ely
Newton, Thomas William Cottle, Cheltenham
Paull, Josiah, Cornwall
Pavitt, Charles James, Rameth
Pearse, George E. Legge, Westminster
Phillips, Howell C., St. Mary's Hospital
Robinson, Alfred William, Old Basford, Notts
Shaw, Henry Sissons, Ryde, Isle of Wight
Simpson, John Henry, Fore-street, E.C.
Squire, Robert H., Hitchin
Stevens, George J. B., Strood
Tomlinson, Philip R., 4. Ebury-street, Eaton-square
Trubshaw, Alfred, Stafford
Wilks, W., Leatherhead.

The under-mentioned Gentleman passed his Examination in the Science and Practice of Medicine, and received a Certificate to Practise on Thursday, March 21:—

Shone, Richard Lewis, Bangor, Carmarthen, North Wales.

The following gentlemen also on the same day passed their First Examination:—

Hawkins, Henry Mortimer, St. Mary's-road, Peckham
Hayward, Sidney, Queen Anne-street
Webb, John Wesley, Abersychan, Monmouthshire.

DEATHS.

BOGGIE.—March 21, Dr. John Boggie, of Broughton-place, Edinburgh, aged 82.

BRIDE.—March 20, John Bride, of High-street, Shadwell, aged 48.

FORGET.—The Medical Profession in France has to mourn over another of its celebrities, in consequence of the death of Professor Forget, of Strasburg, one of the most able and most scrupulous of the Medical Journalists of the day. Notwithstanding the indefatigable activity he displayed, he had been the subject of chronic bronchitis during the last fourteen years, and his death has been occasioned by this assuming an acute form.

GIBSON.—March 12, at Limerick, William Gibson, M.D.; J.P.; aged 87.

GORE.—March 10, William Ringrose Gore, of Limerick, J.P.; L.K. and Q.C.P. Irel.; F.R.C.S. Irel.; M.R.C.S. Eng.; M.R.I.A.; L.M.; aged 52.

HEARD.—March 18, Edwin Heard, of Ballintubber, Ireland, M.D., aged 69.

PETTERS.—March 16, at Fair View, Amlwch, Anglesea, John Jones Petters, M.R.C.S. Eng.; aged 31.

RENDELL.—March 22, Charles Rendell, of Westbury-on-Trym, near Bristol, M.R.C.S. and L.S.A., Admiralty Surgeon and Agent, aged 46.

SQUIRE.—March 20, at sea, on board the P. and O. Co.'s steamer *Peru*, Richard J. Squire, Surgeon R.N.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—The Dinner of this Society will take place next Thursday, and we trust that the attendance will be numerous.

QUEEN'S HOSPITAL, BIRMINGHAM.—The election of Physician has been deferred until the 8th of April. Dr. Brigstocke and Dr. Noott are candidates. Last Monday, Mr. Benjamin Hunt was elected Ophthalmic Surgeon, and Mr. S. A. Parker Dental Surgeon to the Hospital.

COST OF LARGE AND SMALL HOSPITALS.—The following is an extract from the last Report of the Samaritan Hospital:—"The following figures (extracted from a Report by the Committee of the Statistical Society) would lead to the conclusion that it is more necessary to institute an inquiry into the management of large Hospitals than to protest against the existence of small ones. The immense and disproportionate revenues of the three large endowed Hospitals (amounting six years ago to £88,000 per annum, and constantly augmenting) are expended in such a way that, supposing all the money applied to benefit the sick poor, the cost of each patient averages 11s. 9½d. The cost of each patient treated at the Samaritan Hospital averaged in the same year only 3s. 7½d.; and during the past twelve months, notwithstanding the building alterations, the average cost of each patient was 4s. 7¾d."

OFFICE OF THE DENTINAL FIBRILS.—Respecting the office of the dentinal fibrils, a paper in the "Philosophical Transactions" for 1850, "On the Structure of the Dental Tissues of the Order Rodentia," by Mr. Tomes, will afford a convincing proof that there is method and order in the course of the dentinal tubes; and there is little reason to doubt but that in those instances in which these are carried into the enamel, it is to bring the sensitive ends of the dentinal papillæ by which the tubes are filled nearer the surface, so as to obtain more acuteness of feeling, and at the same time secure sufficient strength in the enamel for its purpose of resistance. That such is the intention and use of the tubes and their contents is further borne out by the fact that where the incisors are formed upon, but not around, the pulp, and increase in length by age, protruding from the jaws so as to partake more of the nature of weapons than teeth, we see the tubes and their contents in the exposed part dispensed with and sup-

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planted by solid material; thus doing away with the power of feeling, which would, under such circumstances, be in some measure detrimental to them as implements of warfare. The extension of the fibrils into the enamel is a still nearer approach to the arrangement of their prototypes; in the skin the papillæ pass up into the lower half of the outer layer of epidermis in the same manner, and thus show a correspondence of contrivance equally, it must be supposed, for a similar purpose.—*Mr. Bridgman in the British Journal of Dental Science.*

THE PLAGUE IN ENGLAND.—"The village of Eyam, (in Derbyshire) was one of the last, if it were not the very last place in England, visited by that dire contagion (the plague) in 1666, the year after that in which, in the city of London, Death, on his pale horse, trampled on 3000 victims in one ghastly night. Mr. Mompesson was then Rector of Eyam. The plague was brought thither in patterns of cloth sent from London to a tailor in our village (a). It raged with great violence, and swept away four-fifths of the inhabitants, including Mrs. Mompesson, who expired in her husband's arms; but he, constantly visiting and praying by the sick,

'Drew, like Marseilles' good Bishop, purer breath,
When Nature sickened, and each gale was death.'

The churchyard soon ceased to afford room for the dead, which were afterwards buried in a healthy hill above the village. In the summer of 1757, five labouring men, inhabitants of Eyam, were digging among the plague-graves on the heath, to make a potato-ground for a cottage which had been built there. They came to something which had the appearance of having once been linen. Conscious of its situation, they instantly buried it again; but, in a few days, they all sickened of a putrid fever, and three out of the five died. It was so contagious, that the sick could procure no attendance out of their own family. The disease proved mortal to seventy persons of Eyam. My father, who had two years before been appointed Canon of Lichfield, was residing with his family in that city at the period when the subtle, unextinguished, though much abated, power of this superlatively dreadful disease awakened from the dust, in which it had slumbered ninety-one years."—(From the Correspondence of Miss Seward (whose father was Rector of Eyam), prefixed to her Poetical Works, edited by Sir W. Scott. 3 vols. 1810.)

"(a) A servant, who first opened the box, complaining that the goods were damp, was ordered to dry them at the fire; but, in doing it, was seized with the plague, and died. The same misfortune extended itself to all the rest of the family, except the tailor's wife, who alone survived. From hence the distemper spread about and destroyed in that village, and the rest of the parish, though a small one, between two and three hundred persons."—Mead's Works "On the Plague." Dublin, 1767. P. 217.

VITAL STATISTICS OF LONDON.

Week ending Saturday, March 23, 1861.

BIRTHS.

Births of Boys, 991; Girls, 969; Total, 1960.
Average of 10 corresponding weeks, 1851-60, 1740·5.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	617	597	1214
Average of the ten years 1851-60	663·9	637·7	1301·6
Average corrected to increased population..	..	..	1432
Deaths of people above 90	..	..	9
Deaths in 15 General Hospitals	27	16	43

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1851.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	376,427	1	5	7	2	12	1	3
North ..	490,396	..	14	6	2	18	4	2
Central ..	393,256	..	9	4	..	9	2	1
East	485,522	2	6	9	..	14	10	7
South ..	616,635	..	4	8	6	22	6	8
Total.. ..	2,362,236	3	38	34	10	75	23	21

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29 375 in.
Mean temperature	41·3
Highest point of thermometer	57·3
Lowest point of thermometer	31·3
Mean dew-point temperature	39·0
General direction of wind	W. & S.W.
Whole amount of rain in the week	0·39 in.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dr. West's Lecture On Cerebral Symptoms independent of Cerebral Disease, will appear next week.

Dr. Monckton's letter shall appear next week if possible.

Mr. Wildbore's Paper will be inserted, but we have many communications which have a claim of priority, some of them having been waiting for insertion for several months.

A QUERY.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Can the tunica propria of the kidney become a dropsical cyst? Very recently a pyriform, nearly transparent cyst, weighing 15½ lbs., measuring 15½ inches in its broadest part transversely, and 35½ inches in its long diameter, was brought to me, extracted from the left loin of a five-score pig. At the posterior inferior part the attached surface of the kidney was seen; on laying the cyst open a quantity of straw-coloured fluid, which smelt like urine, flowed out: it contained albumen; the free surface of the kidney then presented, very pale in colour, firm, and lobulated: on cutting into the cortical part it was found intersected by small white bands; the tubular part was vascular. J. H.

COMMUNICATIONS have been received from:—

Professor SIMPSON; Dr. WEST; Dr. MONTGOMERY; Dr. WILDE; Mr. AMYOT; Mr. HOLMES; Dr. MCWILLIAM; Mr. BROWNING; REGISTRAR-GENERAL: Mr. CURLING; Mr. WILDBORE; Mr. OPPENHEIM; Mr. SHIRLEY; Mr. COOPER; Dr. BAINES; Dr. DEVENISH; Mr. VINCENT; Mr. BRUCE; Dr. GRAILY HEWITT; Dr. MONCKTON; Mr. CHEPMELL; Mr. COPNEY, and Mr. VINCENT.

APPOINTMENTS FOR THE WEEK.

March 30. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

April 1. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

ROYAL INSTITUTION, 2 p.m. General Monthly Meeting.

EPIDEMIOLOGICAL SOCIETY, 8 p.m. J. N. Radcliffe, Esq. "On a Tract on Plague. By Gilbert Skeyne, Medicinat to James VI. of Scotland." Dr. Smart "On the Climatology, Topography, and Diseases of Hong Kong."

MEDICAL SOCIETY OF LONDON, 8½ p.m. Clinical Discussion.

2. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

3. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

OBSTETRICAL SOCIETY OF LONDON, 8 p.m. Dr. Barnes "On the Indications and Operations for the Induction of Premature Labour, and for the Acceleration of Labour." Dr. Tanner "On a New Form of Vaginal Pessary."

4. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.

HARVEIAN SOCIETY OF LONDON, 8 p.m. Meeting.

5. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

WESTERN MEDICAL AND SURGICAL SOCIETY OF LONDON, 8 p.m. Practical Evening. Cases by Mr. Cumberbetch and by Mr. Martin.

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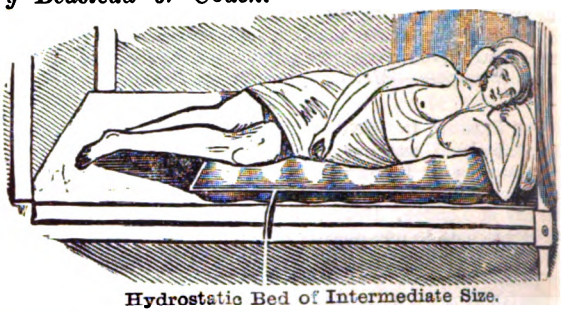
HOOPER'S

HYDROSTATIC BEDS AND WATER CUSHIONS,

For using on an ordinary Bedstead or Couch.

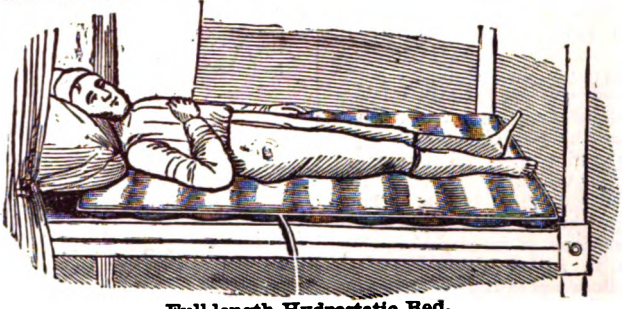
Hydrostatic Bed of Smallest Size.



Hydrostatic Bed of Intermediate Size.

FOR

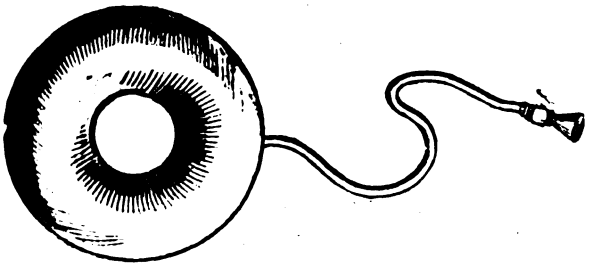
BED-SORES,
CONSUMPTIVE CASES,
DROPSY,
FEVER,
FRACTURES.



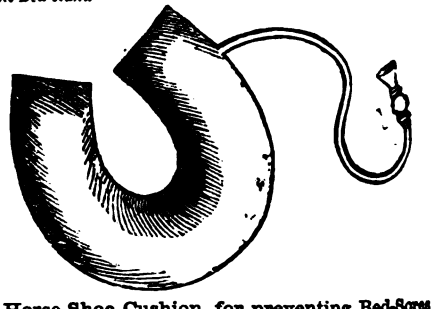
FOR

PARALYSIS,
RHEUMATISM,
SPINAL DISEASES,
AND
ALL INVALIDS.

Full-length Hydrostatic Bed.
(In ordering the Full-length Bed, the width of the Bed-stand should be stated.)



Circular Cushion, for Sitting on.
(Can be had with or without a Hole in the Centre.)

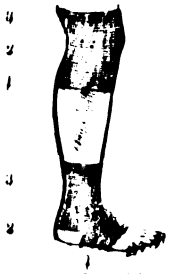


Horse-Shoe Cushion, for preventing Bed-Sores over the Sacrum.

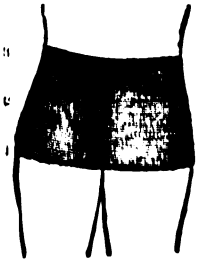
Form of Cushion for the Relief of Bed-Sores, the Application of Hot Water to the Stomach or Feet, or Cold Water to the Head.

HOOPER'S SPIRAL ELASTIC SUPPORTERS.

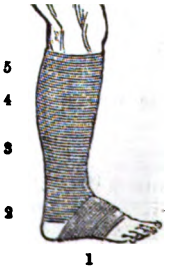
The Figures 1, 2, 3, &c., show the points at which the measures should be taken; the length should also be stated.



Knee-Cap and Ankle Sock



Abdominal Supporter.



Stocking below Knee.

Abdominal Supporter and Thigh-piece.

WILLIAM HOOPER, (Operative Chemist.) **INVENTOR and MANUFACTURER,**
7, PALL MALL EAST, and 55, GROSVENOR-STREET, LONDON.

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ORIGINAL LECTURES.

ON CEREBRAL SYMPTOMS INDEPENDENT OF CEREBRAL DISEASE.

DELIVERED AT THE

Hospital for Sick Children.

JANUARY 26, 1861,

By CHARLES WEST, M.D.
Physician to the Hospital for Sick Children.

PART II.—AS OCCURRING IN THE COURSE OF CHRONIC AILMENTS.

Summary: Cerebral Symptoms succeed to Typhoid Fever—Their Import—Their Gradual Subsidence—Occasionally follow Excessive Mental Work, or come on in Form usually of Intense Head-ache in certain Stages of Physical Development—Convulsive Affections Dependent on Worms, or Irritation of the Second Dentition—Chorea occasionally simulating Cerebral Disease—Essential Paralysis.

GENTLEMEN,—When, last year, my colleagues and I had the honour to give a few lectures in this place on some of the ailments peculiarly incidental to early life, I called the attention of those who were present to cases of by no means rare occurrence in which disturbance of the functions of the nervous system was likely to raise an unfounded apprehension of the existence of cerebral disease.

I then passed in review three different classes of cases in which temporary disorder of the brain either attended the onset of fever, or accompanied the progress of acute inflammation of the thoracic viscera, or was associated with diarrhœa, dysentery, or some other acute affection of the digestive organs.

From want of time, however, I was compelled to leave unnoticed that large and important class in which, during the course of various chronic ailments, symptoms of disturbance of the nervous system give rise to needless apprehension lest they should betoken serious disease of the brain.

It is to these that I propose calling attention to-day; and, if there be among my audience, as perhaps there may, some who have for years been engaged in practice, I must entreat them to bear with me if I tell them nothing more than they have already been taught by their own experience. I could wish, indeed, for no higher commendation, for no more conclusive proof of the usefulness of what I may endeavour to teach to the junior members of our Profession, than that my compeers and my seniors should have already found it all out for themselves.

The first set of conditions in which I have observed anxiety excited among non-professional persons, and occasionally among Medical Practitioners also, is when marked impairment of the intellectual powers, or marked alteration in the disposition, follows on convalescence from some serious illness, such illness having usually been of a febrile character, and probably having been typhoid fever more frequently than any other disorder.

Now, with reference to all these cases, it must be borne in mind that the younger the child, and the humbler its acquirements before the attack, the more far reaching will be the apparent results of any such illness. The disorder that befel the child who had not yet learned to speak, will postpone the attempt for months. It will reduce the little prattler, who had used its newly-acquired powers for a few months, to silence for several weeks, while it will manifest its effects in the older child by taciturnity, apathy, and indifference to its ordinary pursuits.

These effects are far more striking in the child than in the adult, not only because a similar impression produces a far deeper influence on the more fragile than on the stronger being, but also because the processes of growth and development, complete in the adult, are still in progress in the child, and after their interruption by disease, provident Nature cares first for the essential—the repair of the body,—and does not till afterwards expend her energies in restoring the vigour of the mind.

Moreover, I remember no instance in which typhoid fever, or any other disease of which cerebral disturbance has not constituted a main feature, has been followed by permanent enfeebling of the mind, or by the development of disease of the brain, save indirectly by the production of tuberculosis and the subsequent supervention of tubercular hydrocephalus. It is, then, towards this point that attention should be mainly directed, and if the general nutrition is carried on well, no temporary dulling of the mind, no waywardness of the temper need make you falter in your assurance that time will set all right again.

At various epochs of development, symptoms not unfrequently appear which excite apprehension of cerebral disease, such symptoms consisting chiefly in altered disposition, in intellectual dulness, in irritable temper; but we shall, I think, usually interpret their meaning rightly by observing two things. They are moral and intellectual, much more than physical. in their nature, and they either coincide with, or follow, some definite stage of bodily development, such as the second dentition, or, in after age, the first efforts at pubescence, while, moreover, they are too variable, both in kind and degree, to tally with the indications of any definite organic disease of the brain itself.

Similar symptoms occur sometimes as the result of overtasking of the mental powers; and this not always by work excessive in itself, but excessive with reference to the then condition of the child, who may at one time be unequal to the amount of work which, a few months before, it was able easily to accomplish. The nature of the child's studies, too, sometimes overtasks its powers even more than the number of hours devoted to them, and, in such circumstances, the mere altering their nature, even though unaccompanied with any diminution in the time occupied by them, will often suffice to set matters completely right.

It is usually in connexion with the development of the system which accompanies the second dentition that we meet with the severe neuralgic head-aches of dyspeptic children. The history of such cases is usually something of the following kind:—A child whose general health has never been robust, whose nutrition is but imperfect, whose bowels are sluggish, and liver inactive, has occasional attacks of pain in the head; the pain is, for the most part, referred to the forehead, is attended with some intolerance of light, with sense of sickness, and, in some instances, with vomiting. It is usually very severe, so that the child seeks for perfect quiet, for a darkened room, and often asks to go to bed, where the attacks often subside after a short sleep, in the course of a few hours, though sometimes it is not until after a night's rest that they pass away completely. On the day after an attack, however, the child seems in his usual health, though slight over excitement, over fatigue, or mental effort will reproduce the pain, as will any error in diet, or want of attention to the state of the bowels. Independently, too, of any exciting cause, the attacks are apt to come on spontaneously every fortnight or three weeks, and their frequent recurrence at length excites the apprehension of the relatives of the patient, who cannot believe but that such frequent returns of severe suffering must needs imply the existence of formidable disease.

It is not easy to say how long, in any instance, these symptoms may continue. They are obviously dependent on the state of the general health, with the improvement of which they diminish or altogether disappear. The period of their most common occurrence seems to point to some connexion between them, and the general state of the system which accompanies the evolution of the teeth; but they do not seem dependent, as some convulsive affections of infancy and childhood appear to be on the local irritation of one or two teeth in particular, ceasing as they pierce the gum. If I were to seek for an analogy, I should find it rather in that condition of the general health which in the girl at puberty accompanies the difficult and tardy development of the menstrual function, and which improves when that process is complete, and the function fully and regularly established. In confirmation of this view, I may add, that while in the boy it is very unusual to observe this headache occur at the period of puberty, in the female sex the same kind of suffering not seldom recurs at that epoch, and sometimes, as we all know, continues in the woman even during the whole time of sexual activity, each recurring menstrual period being attended by intense headache, with much gastric disorder, though perhaps with little uterine pain, sometimes, indeed, with no pain at all referred to the sexual organs.

Pain in the head, accompanied with more or less intolerance

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of light, sickness, and constipation, are, as I scarcely need remind you, the symptoms that ordinarily usher in tubercular hydrocephalus; and though the knowledge of the public is inaccurate, they yet have a vague notion that such as these are the ordinary accompaniments of water on the brain, and they will come to you for a solution of their doubts, and a relief of their apprehensions. Now, I confess that, in many instances, the off-hand answer which is most desired is impossible; while, unluckily, there is no infallible criterion by which the caution suggested by wise observation can be distinguished from the hesitation of untaught inexperience. Anyhow, it is worth while to have impressed on your mind the fact that the symptoms I have just enumerated do not *always* have so grave an import as commonly belongs to them, and that it is worth while to pause in every case before assigning to them their most untoward meaning.

These symptoms are for the most part observed a little later in life than the age at which tubercular hydrocephalus is most frequent, and they usually coincide with the progress of the second dentition. Further, although they are generally observed in children whose digestion has been liable to frequent disorder, and who are comparatively ill-nourished, the head-aches are not preceded by that progressive loss of flesh or deterioration of the general health, which, in many cases, though confessedly by no means in all, precedes the development of acute hydrocephalus. Moreover, it will often be found that the head-aches have continued to recur at intervals for weeks or months before the patient came under your notice, and that yet no progressive deterioration has been taking place in the child's condition, that the head-aches are not more intense, that no fresh symptom of cerebral disorder has supervened; but that such as they were months before, such they continue still. The attacks of head-ache themselves present some characters by which they may be distinguished from those whose import is more formidable. They are not attended with any remarkable increase of heat of head, nor with any marked pulsation of the carotids. The pulse, though quickened, is rarely unequal or irregular; the bowels, though constipated, answer comparatively readily to aperients; actual vomiting is unusual, and the nausea even rarely outlasts the seizure. Stimulants, too, not unfrequently relieve the pain, instead of aggravating it, and though excitement or over fatigue may have brought on the attack, yet a tale that interests or arouses the child, or any occurrence which brings to it much pleasure, often dissipates the pain completely; while, moreover, the spirits in the intervals become as buoyant as ever, and continue so until the next attack, a marked contrast to the anxiety and depression which often precede for weeks or months the onset of the acute stage of tubercular hydrocephalus.

Pure neuralgia, like the neuralgic headache of the adult, though less common than this sick headache, if so I may term it, is yet sufficiently frequent to need being borne in mind, when the question arises as to the import of symptoms supposed to indicate cerebral disease. The headache in these cases is usually frontal, and care is therefore the more necessary since there is, no doubt, but that continued frontal headache is a very frequent accompaniment of organic disease of the brain, and especially of tubercle of that organ. The severity of the pain, the suddenness of its onset, the completeness of its cessation, the fact that its recurrence for days is attended by no progressive deterioration in the patient's condition, all furnish a clue to its real nature. Moreover its supervention after exposure to malaria, and a certain ill-marked periodicity in its return, are circumstances which will serve in many instances, no less than the absence of other signs of disease of the brain to guard against, too hasty, or too positive an expression of an unfavourable prognosis.

There is besides another large class of cases, in which the occurrence, not merely of vague indications of cerebral disorder, but of violent convulsive attacks, excites alarm, proportionate rather to the formidable nature of the symptoms, than to the importance of the cause on which they really depend.

One of the most remarkable instances of this class which I have ever met with, was furnished by a little girl, 6½ years old, who suffered much from ascarides, on account of which she came under my care on September 16, some years ago. She had benefited somewhat by aperient and other treatment, when on the evening of October 7 she complained of pain in the chest; and at eleven in the evening, having then been some hours in bed, she was seized with a fit, which did not entirely cease till two o'clock the next morning, when she fell asleep, and awoke apparently well about seven o'clock. At nine a second fit occurred, which lasted till eleven; and from that time till the afternoon of the eleventh, fits continued to recur, having at no time a longer interval between them than six hours.

The fits were not quite like ordinary epilepsy; they began with slight rolling of the eyes, and twitching of the mouth, to which succeeded very rapid movements of the throat as if in efforts at deglutition, and these movements became soon accompanied by a sound somewhat between that of a sob and a hiccough, and not unlike the sob of a hysterical patient. During this time the pupils became dilated, the pulse feeble, and the child partially insensible, but she never became absolutely so, and complete consciousness returned long before the spasmodic movements ceased, or the convulsive sound in the throat subsided; the child when asked if she was in pain, pointing to her throat. Very active purgation, during which a large quantity of ascarides was expelled, was followed by the cessation of the convulsive attacks; but for nearly thirty-six hours afterwards, the child complained of pain in the throat, and swallowed difficultly and with a sort of convulsive effort.

Now, how formidable soever the symptoms of disorders of the nervous system may be, it is a rule, subject, I think, to but very few exceptions, that the more anomalous such symptoms are, the greater is the probability of their depending not on grave organic disease, but on some excentric and generally removable source of irritation. In infancy we are so aware of this fact, that when convulsions occur, our first impulse always is to seek in some excentric disturbance for their occasion. I think, however, that we are too apt to forget that this peculiar susceptibility continues, to a great degree, through all the years of childhood.

In the case just related, the presence of a large quantity of ascarides produced a succession of violent convulsions, which ceased permanently on their complete expulsion. Sometimes, however, the irritation occasioned by the existence of worms in the intestines, has more of an intermittent character coinciding with the movements of the parasite, and subsiding for a time on the expulsion of a lumbricus, or the returning quiescence of the tape-worm.

A little boy, 7½ years old, nervous, excitable, ill-managed, and liable to night-terrors, woke at four o'clock one morning, crying, the cries were soon succeeded by an attack of convulsions, which differed from an ordinary epileptic seizure, it being attended by a less profound degree of insensibility than ordinarily accompanies it. For a few weeks the child continued peculiarly excitable, wayward, and fretful, two more convulsions then occurred, soon after the last of which he voided a large lumbricus. This occurrence was followed by a marked improvement, which lasted for a few weeks. The old symptoms then returned, followed by another convulsion, and then another lumbricus was expelled, once more with an amelioration of the symptoms, and a second cessation of the fits. Whether the improvement was permanent, or whether the former symptoms returned, I cannot say, as I lost sight of the patient, but enough has been told of the child's history, to show the connexion between the intestinal irritation produced by the worms, and the violent disturbance of the nervous system.

Though I have given these illustrations of nervous symptoms dependent on the presence of worms, and it would not be difficult to add to their number, it yet is not out of place to caution you against assuming the presence of worms merely because such an assumption furnishes you with the readiest clue to the meaning of certain symptoms of cerebral disorder which you do not find it easy at once to account for. I have seen the early stages of acute hydrocephalus referred to worms, just as I have seen the indisposition which ushered in typhus fever referred to them, without the slightest evidence of their existence, but out of mere mental indolence on the part of the Practitioner which indisposed him from careful observation or thoughtful consideration, and led him to take up with the hypothesis which served most readily to relieve him from the task of watching and reflection.

When symptoms of cerebral disorder depend on the presence of worms, there has almost always been ample evidence of their existence before the nervous system became gravely disturbed by them. In the few exceptions to this

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rule it may be asserted almost positively that their appearance will follow nearly at once on the cerebral disorder which awakens our anxiety and the alarm of our patients' friends. Moreover, the observation I have just made as to the influence which the anomalous character of symptoms fairly suggests, may be borne in mind in all doubtful cases with much advantage; and the question deliberately propounded to yourselves, "Of what definite disorder of the brain or nervous system are these the symptoms; or in what respects are they anomalous and discrepant?" will often save you from many grave errors and many useless regrets.

We are all so familiar with the occurrence of convulsions during the first dentition, that in infancy the risk is rather of the grave disease to which they are possibly due being overlooked, than of the influence of teething in their production being under-rated. On the other hand, the occasional share of the second dentition in exciting epileptic or other convulsive seizures is too little borne in mind, and a graver prognosis than the event justifies is sometimes expressed in consequence.

In a little work on Dentition (a), published some years ago by my friend and former colleague, Dr. Ashburner, there are many cases related illustrative of this fact. Of these I will select the following:—

"A boy, twelve years of age, was cutting the second or posterior permanent molars of the upper jaw before those of the lower, and the process was accompanied by twitchings of various parts of the body. At last he became affected with chorea. Being a very nervous lad, if any notice were taken of him, he would quite involuntarily make the most extraordinary faces, and contort his body into various attitudes that appeared to be most difficult and painful. This chorea continued for three months, during which time a variety of medicines were swallowed. At last he fell into an epileptic fit, struggling much, foaming at the mouth, and grinding the teeth. I thrust my fore finger along the inside of his cheek, and found a hard, cartilaginous space on each side, behind his first molar tooth. I succeeded in gashing these parts. He uttered a scream and fell out of his fit, becoming quite sensible, nor had he a recurrence of his chorea."

So sudden and complete a cessation of symptoms on the removal of the mechanical irritation produced by the pressure of a tooth is decidedly an unusual occurrence. In by far the greater number of instances, the symptoms of disorder in the nervous system do not admit of being cut short thus suddenly and decisively; they depend not simply on the local irritation produced by one particular tooth, but, like the headaches which I spoke of at the commencement of this Lecture, they are the result of the disturbance of the nervous system, to which the whole process of development has given rise, just as, in later life, the hysteria of the young woman is connected with the imperfect accomplishment of the sexual function, and is not removed by a single occurrence of menstruation.

To this class of cases may be referred the history of a boy between eleven and twelve years old, whom I saw some years ago. While, apparently, in good health he was attacked by a fit one morning, in which his head was drawn to the right side. His face was distorted, especially its right side, and his right arm was in much more violent movement than his left. This fit was not preceded nor followed by sleepiness or headache, nor was it attended by any loss of consciousness, and the same characters were observed in all his subsequent seizures except one, which—the third in order of occurrence—was followed by temporary delirium for five or ten minutes. With the exception of the first and third of these attacks, all the others ceased in a minute, and the instant the spasmodic movements subsided, the boy resumed his former occupation, as if nothing had happened. Only once did more than one seizure take place in the course of twenty-four hours; but the intervals between two attacks were very irregular; sometimes eight days had passed without an attack, while, at other times, they recurred daily for three days; and, altogether, between the beginning of July and the end of December, more than fifty occurred, with no alteration of their character or increase in their severity, while neither the boy's health nor his intellect appeared to have suffered in any respect from the affection. One point observed with reference to them—which, I may add, is often noticed in cases of epilepsy—was, that they almost invariably happened soon after rising in the morning, generally between the hours of seven and nine o'clock.

At first, he was actively purged, but with no effect; he then took the valerianate of zinc likewise fruitlessly; and then, as he was cutting the second molar tooth in the right side of the upper jaw, and as there was much tenderness of the gum over it, the gum was freely lanced, and all treatment was suspended. No amendment followed this measure, and the boy was, therefore, put for a time on the nitrate of silver, but with no results.

The idea which had been entertained of the possible connexion of the attacks with the process of dentition appeared to me still to be the most probable, and for the following reasons:—That, in spite of the continuance of the attacks, there had been no such deterioration in the boy's condition as might have been expected if they had been dependent on cerebral disease; that no impairment of powers over the affected side had followed the attacks, while such an occurrence would have inevitably occurred if the attacks had been dependent on tumour or tubercle in the brain; that headache was completely absent, and all the general functions were perfectly well performed; while, further, the anomalous character of the attacks themselves seemed still further to point to some excentric source of irritation.

On looking into the boy's mouth, the teeth in the upper jaw were observed to be very crowded and overlapping each other; the first molar on the left side was decayed, the second molar was still beneath the gum. I advised the extraction of the decayed tooth, and lancing the gum over the second molar, while all medical treatment besides should be discontinued. Before these measures were adopted, the boy had six consecutive attacks in the course of one day; two of them being very severe, and attended like ordinary epilepsy, with loss of consciousness. The extraction of the decayed tooth was followed by immediate diminution in the convulsive attacks, both in point of frequency and severity, and the improvement lasted for nearly two months. The second molar tooth was then partly through the gum, when a succession of seizures, some of them accompanied with loss of consciousness, once more took place. Free lancing of the gum was succeeded, as before, by immediate improvement, and not only so, but the tooth being now quite through the gum, all spasmodic movements of the arm ceased, and occasional slight twitchings of the face were the only relics of symptoms which had seemed so formidable.

One caution, which this case suggests, I cannot forbear to offer, although it is not immediately connected with the subject of this Lecture. It relates to the possibility of attacks of this nature, and still more of those of a more decidedly epileptic character, becoming permanent as the mere result of frequent recurrence, and this quite independently of the existence of any organic mischief in the brain. Thus, I have seen instances in which the convulsions that originated in whooping-cough, have outlasted the disease that occasioned them, and the fits which at first were due to some error in diet, reproduced again and again by similar though perhaps smaller indiscretions in the same respects, until they became at length habitual. Each fit, too, leaves the child more predisposed to its recurrence, and from slighter and still slighter causes; so that never is the old Latin adage, *Obsta principiis*, more important than in the case of the convulsive diseases of early life.

In the majority of cases of chorea no diagnostic difficulty arises; the irregular movements of the limbs, the strange grimaces and gesticulations, sufficiently characterise the disease. Now and then, however, though the movements of the limbs are very slight, or partial, the speech is much affected, and the child, partly, perhaps, in consequence of the difficulty in communicating its ideas, becomes dull, low-spirited, and apparently sullen, and apprehensions are thus excited lest these unusual symptoms should betoken disease of the brain.

A boy, aged 8½ years, whose health had always been delicate, though he had suffered from no special illness, seemed feebler than usual when he returned from school for his Christmas holidays, and his mother's anxiety was excited all the more with reference to his indisposition from the circumstance that his father had died of consumption. In the course of a fortnight from his return home, it was noticed that power over his right hand was much impaired, and three days after, power over his right leg failed also, and his speech became at the same time much affected. The speech grew

(a) On Dentition, etc. 12mo. London: 1834. P. 97.

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rapidly more and more unintelligible, the boy stumbled when walking, and occasionally fell, and there were slight twitchings of the muscles of the right arm and leg, though these were at no time remarkable, and the face was never distorted. With the progress of these symptoms, too, the boy, never very quick, had become peculiarly dull and apathetic, so that it was not to be wondered at if the attention of his friends became fixed on those symptoms which were of the gravest import, and were apprehensive lest they should betoken disease of the brain.

Close inquiry, however, elicited facts that seemed to warrant the more hopeful view which the event of the case fully justified. There was no complaint of headache, there had been no sickness; the pulse, though feeble, was not at all irregular; the tongue was protruded straight; the pupils were equally dilated, and equally susceptible to the influence of light; the movements, which ceased completely during sleep, were unaccompanied by any rigidity or contraction of the muscles of the affected limbs, and close observation discovered that though extremely slight on the left side, the irregular movements did affect both sides of the body. In a week or two more the affection of the left side became quite as marked as that of the right, deglutition, too, as well as speech, became affected, and the anomalous symptoms merged into those characteristic of an ordinary attack of somewhat severe chorea, from which under general tonic treatment the boy recovered, the brightening of his mind preceding, as I have seen it do in other instances, the amendment of the purely choreic symptoms,

I have seen, two or three times, a peculiar spasmodic affection in children which, though I believe it to be of no serious moment, yet has attracted attention, and excited anxiety by its singularity. It consists in the extremely frequent occurrence of involuntary sighing respiration: the child, who seems otherwise in tolerable health, and who follows his usual occupations and amusements, though listlessly and languidly, fetching a deep sigh almost every second or third inspiration, with a most painful and depressing monotony. All day long the sighing continues, ceasing, indeed, at night when sleep is undisturbed, but beginning again in the morning. No external condition appears to check, or indeed much to modify it; it is usually worse when the child has been long without food, but eating does not put a stop to it, and the child sighs, as if most woe-begone, between each few mouthfuls that he takes. Once I saw the sighing followed by a causeless attack of difficult breathing similar to the nervous dyspnœa of a hysterical patient, but usually from beginning to end the sighing continues the only symptom of illness. The attack comes on gradually, and subsides in the same manner. In the instances which I have seen, however, it did not continue for much above ten days with such distinctness as to force itself upon observation, but abated by degrees under the employment of mild tonics, and of attention to the digestion, which usually is more or less disordered.

I have never seen it associated with other symptoms pointing to disorder of the brain, nor have I known it issue in any graver ailment, but its singularity has excited fears which perhaps this mention of it may serve to allay.

I must not close this Lecture without some reference to a very important class of cases, to which, indeed, I hope on a future occasion to call your special attention, where the loss of power over some of the muscles raises the suspicion that the brain is the seat of serious disease. In the adult, we are familiar with the occasional occurrence of partial paralysis, especially of facial palsy, independently of cerebral disease. We can therefore the more readily understand how a similar occurrence may take place in the more sensitive and delicate frame of the child without any abiding disease of the nervous centres. Those slow processes of disorganization which, affecting the brain, in the adult produce palsy, sometimes of one part, sometimes of another, so that we look on the impaired power of movement as the attendant commonly on some grave disease, and the harbinger of its fatal issue, are of extreme rarity in the child. Tumours, almost invariably tuberculous, within the brain, or disease of the spinal column extending from without inwards, until by its advance the cord itself becomes implicated, are almost the only conditions in which paralysis in childhood depends upon mischief seated in the nervous centres. In the young, the loss of power is indeed uncertain in its issue, as far as the complete recovery of the patient is concerned; it is grievous in its results, for it often leads to permanent deformity; but it is very rarely that it need excite apprehension with reference to life, or health, or intellectual power. In the grown person, the import of paralysis is commonly of the gravest kind, subject, indeed, to exceptions, of which facial paralysis furnishes the most frequent illustration. We are bound, indeed, to scrutinise each case most carefully; but in the grown person, our inquiry commonly resembles that which the Judge puts to the condemned criminal when he asks him whether he has anything to say why sentence of death should not be passed upon him. In the child, care, too, is needed not to overlook some peculiarity in the case which may attach to the loss of power a worse than its wonted significance; but yet you will do well to remember that life is very rarely threatened by paralysis in early life; that organic disease is the rare exception, not the ordinary occurrence. It will save you much useless anxiety, and your patient's friends much needless sorrow.

And now, gentlemen, I have done for to-day,—a short Lecture of fragments of imperfect knowledge, gleaned here and there from an occasional success—oftener still from mistake and failure. Bits of cases, seen once or twice or three times, rarely watched from their beginning to their end, such are the materials out of which a Medical experience is formed. Scant materials and an unskilled workman, and so there is formed but an unsightly structure. It is one, however, which, well or ill, each must rear separately for himself, and can in the building appropriate comparatively little of the labours of his predecessors. And yet the large quantity of materials which this Hospital affords remains still, after the lapse of nine years, almost unworked. My colleagues and I may tell something of what we believe that we have learned; but our wish, and the wish of the founders of this Hospital is, that some of the younger members of our Profession would come here and learn more and learn better for themselves. We promise you that in the endeavour no help which we can give shall be wanting.

ORIGINAL COMMUNICATIONS.

ON THE INFLUENCE OF OZONE ON ORGANIC SUBSTANCES.

By T. K. HORNIDGE, M.B. Lond., F.R.C.S.

The discovery by Schönbein of that peculiar condition of oxygen named by him ozone, and its great differences from ordinary oxygen, all referable to its more energetic oxidising power, have for the last few years attracted considerable notice among experimental physiologists, especially in Germany. It was natural to expect that a substance capable of acting with energy on various inorganic substances would be found to possess a similar power over some at least of the constituents of the animal frame; and there are, indeed, some phenomena observable in their mutual reactions which have given rise to the suggestion that ozone may play a great part in the production of the unceasing changes in the animal body.

For a complete elucidation of the subject, it will be necessary for me to prelude my observations with a brief notice of the leading characteristics of ozone, its sources, and its nature. Its great source is unquestionably electricity, whether frictional or dynamic. Hence its presence in abundance in the air after a thunderstorm, in the oxygen generated by the electro-decomposition of water, in oxygen exposed for a time to a bright sunshine, in the air over an evaporating surface, and in the oxygen given off from plants by respiration. Now, this origin of ozone from electricity gave probably the first clue to its nature; and it is now commonly regarded, according to Schönbein's theory, as oxygen in a state of tension or negative polarity. In accordance with this theory, it has been proved that oxygen exists also in the opposite condition of positive polarity, or antozone. Not that antozone has ever yet been isolated: the nearest approach to its isolation is found in peroxide of hydrogen; its existence is only inferred from the result of certain experiments. If peroxide of hydrogen be added to a solution of permanganate of potash both the peroxides are destroyed, *i. e.* deoxidised, with a large escape of ordinary

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oxygen—an experiment which can only be explained by assuming that the excess of oxygen in the one peroxide, is in an opposite condition of polarity from that in the other, and that they combine to neutralise each other. On this view peroxides are divisible into two classes: the peroxides of hydrogen, the alkalies, and alkaline earths containing antozone; those of the metals, as manganese, lead, cobalt, nickel, and others, ozone. Now, whether, under all circumstances, the generation of ozone is necessarily accompanied by that of antozone, is as yet unproved; but there are many facts which render it highly probable. Only a very small proportion of air or oxygen operated on can ever be ozonised (it is estimated at not more than $\frac{1}{1500}$th) probably because it is constantly tending to its own destruction by reuniting with the antozone. Certainly the action of phosphorus, in the ordinary mode of obtaining ozone is not limited to its production. Nitric acid is always produced. The water in the vessel has a slight bleaching power (due, probably, to the presence of antozone, to the constant production of which, at least, of peroxide of hydrogen, chlorine owes its bleaching power); and the phosphorus itself becomes changed, as in two sticks used in my experiments, which are completely covered with a black coating of amorphous phosphorus. May not this change be referred to a kind of polarity taking place in the phosphorus simultaneously with that in the oxygen? amorphous phosphorus bearing probably the same relation to ordinary phosphorus that ozone bears to oxygen.

The ordinary action of ozone is one of energetic oxidation. In spite of the small proportion of ozone present, iodine or chlorine is readily set free from its combinations; silver leaf is converted into oxide of silver; even mercury is superficially oxidised; the white oxide of lead is converted into the brown peroxide; and certain noxious gases, as sulphuretted hydrogen, are completely destroyed, as may be readily shown by suspending in ozone a paper black with sulphide of lead: it is rapidly bleached, by conversion into the sulphate. Ozone, therefore, is the great natural scavenger of the air. Hence it is always most abundant where there is least impurity in the air. In mountainous regions, and by the sea, with a sea-wind, it is abundant; whereas near large towns, when the wind has passed over the town, it is wanting. Nevertheless, the relation of the presence and abundance of ozone to the presence of certain impurities in the air, especially in relation to the presence of the *materies morbi* of epidemics is enveloped hitherto in difficulties and uncertainty; due partly, I think, to the insufficiency of the ordinary test of ozone, which may be affected by many gases necessarily present in the air of large towns (as sulphurous or nitrous acids). Quantitative analysis has as yet been quite unattempted, although by no means impracticable by a method suggested by Dr. Bernays,—viz., an estimate of the alkali set free from the decomposed iodide of potassium. In the list of disinfectants ozone must occupy a low rank, owing to the very large quantity of ozonised air which would be required for the destruction of any considerable quantity of foul gas which might be present. It might, however, be advantageously introduced into the sick room when there is no special source of foul air, and where the frequent introduction of fresh air from without is prevented by the weather.

In the study of the action of ozone on organic bodies, there are three separate classes of phenomena for consideration:—1st. Its chemical action on pure isolated organic substances. 2nd. Its influence on the animal body when inhaled. 3rd. Its effects when taken into the alimentary canal.

Of course, many organic substances are perfectly indifferent to the action of ozone. But there is a peculiar class which, though not apparently acted on, or at all altered in constitution by it, are yet capable of absorbing and retaining it in large quantities, and such bodies have been called "ozone-carriers." The principal bodies of this class are distilled or essential oils, especially the oil of turpentine. Oil of turpentine, in fact, has so great an affinity for ozone that almost all the oil exposed for sale in shops contains it, in consequence of its frequent exposure to the air. The same may be said of oil of cinnamon, and many other essential oils. Oil of turps may contain as much as fifty per cent. of its volume of ozone, and is, therefore, a very convenient medium for acting on other organic substances. What change the oil itself undergoes during the process of absorption, or whether, indeed, it undergoes any change at all, or receives the ozone simply as an act of solution, is altogether unproved. It is equally uncertain—it is, indeed, a kind of corollary from what has just been said—whether the oil is merely the recipient of already formed ozone, or whether it has in itself the power of acting as a sort of polarising agent to the oxygen with which it comes in contact, thus generating the ozone. Next to essential oils, the best ozone-carrier is ether. It is, however, more or less changed by the ozone, and is not capable of absorbing so large a proportion of it.

In Wunderlich's *Archives*, for 1848, Professor Hoppe has published a paper, in which he details a number of experiments which he performed on animals, principally frogs and rabbits, illustrative of the effects of this ozonised turpentine when introduced into the system, either by the alimentary canal or through a wound. He shows, indeed, that in large doses it produces intense hyperæmia of the part with which it comes in immediate contact, followed by the general symptoms of irritant poisoning, and ending in general paralysis, especially of the heart, and death. After perusing the details of his experiments, I cannot ascertain that there are any symptoms specially due to the circumstance of the oil being ozonised, except the greater rapidity of its action. It simply appears to act as a more powerful irritant than the unozonised oil, due, in all probability, to some slight alteration in the composition of the oil itself.

These ozone-carriers are, however, of great use in organic investigations, because by their means ozone can be employed in a much more concentrated form than it is ever possible to obtain it in its gaseous condition. Accordingly there are two methods of ascertaining the influence of ozone on organic substances: one is, to shake the substance in a jar of repeatedly renewed ozonised air; the other, to mix the substance with ozonised oil. The general results of both methods are, of course, the same; but the oil is more rapid and more complete in its action; and it has this further advantage, that by means of Tr. Guaiaci you can ascertain readily the degree of affinity that the substance has for the ozone. Thus, if blood be mixed with the tincture, and then some ozonised oil added to it, there is instantly a blue colour produced, showing that there has been a liberation of ozone from the oil, which in its passage through the liquid has acted on the tincture. But if a solution of sugar be substituted for the blood, no such change of colour occurs, because the sugar, unlike the blood, has no desire for the ozone, which, therefore, is not set free from the oil.

The general action of ozone on those organic substances which are amenable to its influence is one of active oxidation; and the study of these actions enables us to trace, in some instances, the stages through which the more complex organic substances pass in their decomposition, as well as to distinguish those which are more fixed in their constitution, and therefore resist the tendency to destruction by oxidation. As a general rule, it is found that those substances which may be oxidised by the action of $Pb O_2$, are also readily acted on by ozone. I do not intend, however, to refer to organic substances which are not found in the animal body, but shall speak first of the changes which are observed to take place in blood under the influence of this agent, partly because they are more marked and more energetic in this fluid than in any other, and partly because they present points of special interest in relation to the vital processes. Blood is very greedy of ozone, *i.e.*, it absorbs it very rapidly and in large quantities, whether from the air or from other solutions. If blood, freed from fibrin, which has been made quite red by shaking with air, be mixed with the ozonised ether, or turpentine, it undergoes a gradual change of colour; it darkens, becoming like venous blood, and at last it is perfectly black. This change, however, requires, at ordinary temperatures, a time varying from twelve to forty-eight hours; but if the liquid be kept warm, it may be effected in three or four. This change of colour appears to denote the commencement of decomposition, or rather of destruction of the corpuscles; for already, under the microscope, they are seen to be altered in shape, distended and globular, many of them burst and broken down, forming a slight deposit of *débris* if allowed to subside. After this a process of deodorisation commences; the blood passes through shades of chocolate to light-brown, becoming turbid from the separation of greyish-brown flocculi. By further action of the ozone the solution becomes eventually quite colourless and transparent; the coagulum diminishes, and becomes nearly, but never quite, white. Under the microscope no trace of the corpuscles is to be found, only a few fine granules. The slight remaining

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deposit is soluble in alkalies, and re-precipitated by acids, and in all respects possesses the properties of albumen. The evident results of the decomposition are carbonic acid and water. These are the only two that have been proved and attempted to be estimated; but the estimates are unreliable, partly on account of the slowness of the action, and the length of time over which the experiment is necessarily prolonged, and partly because ozone acts energetically on the caoutchouc connexions of the apparatus employed. What becomes of the nitrogen is quite uncertain, whether it is evolved as nitrogen gas, or, what is more probable, helps to form some secondary product, such as leucin, tyrosin, etc.

If the blood, instead of being acted on by ether or oil, is shaken with ozonised air, the same changes take place; but they require a longer time, from twelve to eighteen or twenty days, and the destruction of organic matter is not eventually so complete. If the corpuscles be separated from the remaining constituents of the blood, and dissolved in water, the solution becomes in every respect like the unaltered blood. It is not so with the serum without the corpuscles. If the serum be acted on by the ozonised ether or turpentine, it is rendered turbid, and a slight coagulum is thrown down; but no perfect oxidation can ever be effected. If the serum is acted on by ozonised air, it absorbs ozone rapidly at first; it is decolorised, and deposits a sediment; but even after many weeks there is still a considerable unaltered sediment, the albumen never being so completely destroyed as in similar experiments with blood. A pure solution of albumen from an egg is indeed acted on more completely: a very considerable deposit of coagula takes place, and the solution changes colour, becoming greenish-yellow, as though the change was due, partially at least, to ordinary decomposition. Afterwards the coagula re-dissolve, the fluid clears, and finally, with the exception of a small deposit, it is found to be free from all trace of albumen. But although the action is eventually nearly as complete as in blood, it requires a much longer time; in fact, it is rarely completed under four or five weeks, and is accompanied, as I have already noticed, with some evidences of ordinary decomposition or putrefaction. Whereas, the change of blood is much more energetic and rapid, and, if a due supply of ozone is kept up, is never accompanied by any signs of putrefaction. These differences are due to the hæmatin of the blood-corpuscles, which, as is well known, is the great absorbent of oxygen in the body. Now, it is stated, that the blood-corpuscles will absorb much more ozonised oxygen than unozonised; but it is, in fact, uncertain whether this is due to a simple power of absorption and retention, or whether it is not rather due to the fact, that they are continually giving up the ozone for the work of destruction, *i.e.*, oxidation of themselves and the surrounding organic matters, a work which ordinary oxygen out of the body is quite incompetent to perform.

The deportment of blood with ozone suggests a few questions of considerable interest. First, it would be important to determine whether the change of colour is of the same nature, and due to the same cause, as the change which takes place during circulation in the systemic capillaries; in other words, whether the presence of ozone is the cause of the dark colour of venous blood. This question involves the preliminary decision of two points at least. First, whether there is any source of ozone existing in the body: whether any tissue has the power of exciting the polarity of oxygen, so as to generate ozone as the result of its nutritive processes; and, secondly, what is the meaning and interpretation of the change of colour in the blood under the influence of ozone? It has never yet been shown that any such power exists in blood itself; on the contrary, all experiments made for that purpose tend to prove the reverse. Blood shaken with air or oxygen, or left to decompose with free access of air, never, at any time, gives the slightest indication of containing ozone. The same may be said of the various tissues of the body; but this does not show that there is no generation of ozone in the process of growth or nutrition; and when we consider, on one hand, the apparent dependency of the generation of ozone upon electric action; and on the other hand, the intimate relations between animal nutrition and the nervous system, it must be admitted to be not altogether improbable that the oxygen in the circulating fluids may undergo, partially at least, this change. Blood may be slightly ozonised by being made the medium of a continuous current of galvanism: although it must be admitted that the blood, as it exists in the system, has not yet been shown to contain ozone. It is not difficult, I think, to interpret the change of colour which takes place in the blood during the first few hours of the action of ozone. Considering the manifest change in the corpuscles which, subsequently, progresses more rapidly to their entire destruction, I think we may fairly regard it as the first physical sign of their degeneration. Whether any analogous degeneration of corpuscles takes place in the systemic capillaries as a consequence of their ministration to the function of nutrition is, I suppose, quite uncertain. The immediate physical cause of the change of colour appears to be, indeed must be, in both instances the same,—viz., an alteration of the shape of the corpuscles; but I do not think there has yet been offered an adequate explanation of the cause of that alteration in the body. But whether the change is due in the two instances to the same cause or not, it is clear that it is accompanied by somewhat different conditions, for in the body it is instantaneous, whereas under the influence of ozone it requires, under the most favourable circumstances, two or three hours. Casein behaves towards ozone like albumen, being, indeed, transformed, in the first instance, into albumen. Of the remaining organic substances to be met with in the body, it may be stated, as a general rule, that all those which pass off as pure excretory matters are indifferent, or nearly so, to the action of ozone. Thus bile, when freed from mucus, fat, and colouring matter, is unaffected by it; and, of course, the various constituents of bile, taurine, glycocoll, the organic acids, etc. The same is true of the excretory constituents of the urine, urea, allantoin, alloxan, and kreatin; but uric acid, which is perhaps not a perfect excretion, is readily oxidised, producing allantoin, urea, and oxalic acid. Fibrine is quite unaffected by ozone, which seems to accord with that theory of the nature of fibrine which regards it rather as the product of waste, as worn out albuminous matter, analogous to an excretion, than as the material of nutrition. There are substances, however, which are unaffected by ozone, but which are oxidised in the system: such are gelatine and sugar.

Experiments on the tissues of the body are of no value, on account of the blood which they contain.

STATISTICS OF

AMPUTATION AT ST. GEORGE'S HOSPITAL DURING SEVEN YEARS.

By G. F. COOPER and T. HOLMES,
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The total number of amputations is 149, and the total mortality 41, or 27·6 per cent. This agrees pretty nearly with the result of Mr. Bryant's paper in Vol. xlii. of the Medico-Chirurgical Society's *Transactions*, which gives, as the general rate of mortality, 25·3 per cent. The particulars of this difference are not very important, but will be indicated as we proceed.

A table is appended in which the amputations are separated into those of the thigh, leg, arm, and forearm, and these again are subdivided according to Mr. Bryant's method, which has been adopted, not because it appeared faultless, but because, having been published under the sanction of the Medico-Chirurgical Society, it seemed likely to be taken as the standard for future comparison; and therefore it would be more convenient to have other similar researches arranged on the same plan. The main objection to Mr. Bryant's arrangement is that it separates, under the classes of "Pathological Amputations," and "Amputations of Expediency," things between which there is no real difference. There is an obvious difference between amputations undertaken for acute diseases threatening life, and those for deformity where the patient is in good health; so far the distinction is natural, but it is less easy to see the propriety of separating operations for necrosis (under the head of "Pathological Amputations") from those for tumours (under the head of "Amputations of Expediency"), inasmuch as both affect the same organs, and are equally threatening to life; and in the former, as well as the latter, the section is, or ought to be, made through healthy bone. The real amputations of expediency—viz. those for deformity, are so rare that no data can be collected about them in any reasonable space of

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What Limb.	Pathological.				Amputations of Expediency.				Primary.				Secondary.				Total.			
	Total.	Cured.	Died.	Per-centage of Deaths.	Total.	Cured.	Died.	Per-centage of Deaths.	Total.	Cured.	Died.	Per-centage of Deaths.	Total.	Cured.	Died.	Per-centage of Deaths.	Total.	Cured.	Died.	Per-centage of Deaths.
Thigh	51	38	13	25·6	12	7	5	41·6	9	4	5	55 5	4	2	2	50·	76	51	25	32·9
Leg	27	18	9	33·3	4	4	..	..	6	3	3	50·	3	2	1	33·3	40	27	13	32 5
Arm	10	8	2	20·	4	4	..	..	6	5	1	16·6	2	2	..	..	22	19	3	13·7
Forearm	6	6	..	..	1	1	..	..	4	4	..	..	..	..	..	..	11	11	..	..
Totals	94	70	24	25·5	21	16	5	23·8	25	16	9	36·	9	6	3	33·3	149	108	41	27·6

time. In the whole of Mr. Bryant's series of 300 cases, only 4 amputations of the thigh from this cause are recorded. Thus, though we have followed Mr. Bryant's classification, we would wish it to be understood that we do not entirely accept his dicta, and would have preferred, except for the sake of uniformity (an essential requisite in statistics) to have added together both these classes under the name of "Amputations for Disease."

This much being said by way of preface, we proceed to sum up our results. The whole number of amputations recorded is 149, and the series comprises all the amputations performed at St. George's Hospital during the eight years from 1852 to 1859 inclusive, with the exception of the latter half of 1858, and the first half of 1859, during which period the statistics were neglected; so that, allowing for this, the table may be said to comprise all the amputations for the space of seven years.

Of this number, 76 were amputations of the thigh, of which 25, or 32·9 per cent., died; 40 of the leg, of which 13, or 32·5 per cent., died; 22 of the arm, of which 3, or 13·7 per cent., died; and 11 of the forearm, all of which recovered.

It will be observed that the mortality in amputations of the leg is almost exactly equal to that of the thigh, while in Mr. Bryant's series it was even greater. This Mr. Bryant refers to the greater frequency of traumatic amputations in the leg. In our table, however, the excess of mortality in amputations of the leg is found in the pathological class.

Amputations of the Thigh.—Of the 76 amputations of the thigh, 51 are classed as "pathological," of which 13 (25·6 per cent.) died, and 12 as "of expediency," of which 5 (41·6 per cent.) died. Putting these together, we should have 63 cases with a mortality of 18 or 28·5 per cent. The traumatic amputations amount to 13, of which 7, or 53 per cent., died; of these 9 were primary, of which 5 died, and 4 secondary, of which 2 died.

Causes of Amputation and of Death.—Of the 51 cases classed as pathological, 8 were performed on account of abscess in the knee-joint; of these 5 died, one of sloughing of the stump and phthisis, and 4 of pyæmia. 35 were for chronic affections of the knee; of these 5 died,—2 of pyæmia, as proved by post-mortem examinations; in 2 others, pyæmia was inferred from the symptoms during life; the fifth from phthisis, with sloughing of the stump.

It will be observed as an interesting circumstance, that the mortality, in the latter class of operations, is precisely the same as in Mr. Bryant's series, viz., 1 death in 7.

The 8 remaining amputations were performed for various diseases:—2 for malignant disease, 2 for gangrene after ligature of the femoral artery, 2 for necrosis, 1 for arterial hæmorrhage in phagedæna, and 1 for necrosis and abscess after excision of the knee; of these 3 died, 1 of exhaustion, 1 of secondary hæmorrhage, and one of pyæmia.

Of the 12 cases classed under the head of "Amputations of Expediency," 9 were on account of tumours, 2 of loss of skin after diffuse cellular inflammation, and 1 on account of old contraction of the knee with atrophy of the leg; of these 5 died,—3 of pyæmia, 1 of exhaustion, and 1 of secondary hæmorrhage.

Of the 13 traumatic amputations, 9 were primary, and 5 of these died,—2 from pyæmia, 2 from shock, and 1 from other injury, viz., rupture of the bladder; this case should perhaps be omitted in estimating the mortality.

Of the 4 secondary amputations of the thigh, 2 died, both of pyæmia.

So that of the 25 deaths after amputations of the thigh, we have as the causes:—

Pyæmia (in two cases only inferred from the symptoms during life)	16
Secondary hæmorrhage	2
Phthisis	2
Exhaustion	2
Shock	2
Other injury	1
	25

Amputations of the Leg.—The total number of amputations of the leg is 40, 31 being for disease, viz.—27 "pathological," and 4 "of expediency;" and 9 traumatic, 6 primary, and 3 secondary.

Of the "pathological," almost all were performed on account of chronic disease of the bones of the foot and leg; those for acute disease of the ankle-joint being only 3 in number, of which 1 died. Of the remaining 24, 8 died,—4 from pyæmia, 1 from exhaustion, and 3 from the effects of strumous disease in remote parts of the body, the lungs, brain, and kidneys. Of the "Amputations of Expediency," 2 were performed on account of painful stumps of former amputations (in the same limb), and 2 for tumours; all these recovered. Of the 9 traumatic amputations, 4 died,—viz., 3 primary and 1 secondary—2 from pyæmia, 1 from secondary hæmorrhage, and 1 from exhaustion.

Amputations of the Arm.—The whole number of these amputations is 22; 14 for disease, of which 2 died, and 8 for accident, of which 1 died. Of the former class, 10 are put down as "pathological," all having been operated upon for disease of the bones or of the elbow joint, where some contra-indication existed to excision. Of these 2 died, both of pyæmia. 4 are classed as operations "of Expediency," 3 on account of the effects of burn, and 1 (at the shoulder-joint) for malignant tumour of the humerus. All recovered. Of the traumatic amputations, 6 were primary and 2 secondary. 1 of the former died of pyæmia.

Amputations of the Forearm.—These are 11 in number, and all were successful. 6 were performed on account of disease of the hand, etc., 1 ("of Expediency") for a tumour, and 4 were primary amputations.

Comparative Mortality of the Various Classes of Amputations.—Pathological amputations amount on the whole to 94, of which 24, or 25·5 per cent., died; amputations of Expediency to 21, of which 5 died, or 23·8 per cent.; primary amputations to 25, of which 9, or 36 per cent., died; and secondary amputations to 9, of which 3, or 33·3 per cent., died. These figures, as far as they go, do not bear out Mr. Bryant's statement, that "Amputations of Expediency" are much more fatal than "Pathological," and secondary than primary amputations. The list, however, is not sufficiently long to justify any very positive deductions.

Comparative Mortality of Circular and Flap Operations.—Of the 149 operations of which our table consists, 46 were flap amputations and 97 circular. Of the remaining 6, 3 were not noted as to this particular, and 3 cases of Syme's amputation are excluded. The results were as follows:—Of 74 amputations of the thigh, 52 were circular, 15 of which died, showing a mortality of 28·8 per cent.; 22 were flap, and 10 died, showing a mortality of 45·4 per cent.

The shortest period between the operation and the patient's discharge from the Hospital was, in the circular, 23 days, and in the flap 24 days; the longest, in the circular, 126, and in the flap 105 days; the average period of cure in the circular 60, and in the flap 42 days.

Of 37 amputations of the leg, 21 were circular, of which 3 died, a mortality of 14·2 per cent.; 16 were flap, and 8 died, a mortality of 50 per cent. With respect to the period

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of their stay in the Hospital, the shortest period was in the circular operations 19, and in the flap 20 days; the longest, in the circular 120, and in the flap 94 days; the average, in the former 49, and in the latter 46 days.

It ought to be noted, that, in estimating these facts for the flap operations, the details of one case are excluded, in consequence of its exceptional character. It was that of a man who submitted to amputation of the leg twice, on account of irritable and painful stump. The foot had originally been removed by Syme's amputation at another Hospital, and the leg was twice amputated at St. George's. On each occasion he was kept in the house a long while, on account of the painful and irritable condition of the integuments. It appeared unfair to represent the delay which this unusual state of parts occasioned as a result of the mode of amputating.

Of 22 amputations of the arm, 17 were circular, of which 2 died, a mortality of 11·8 per cent.; 5 were flap, of which 1 died, a mortality of 20 per cent. The shortest period in Hospital was, in the former, 20, in the latter, 26 days; the longest, in the former, 96, in the latter, 70 days; the average of the former, 41, of the latter, 51 days.

Of 10 amputations of the forearm, 7 were circular and 3 flap; none died. The shortest time in the Hospital was, in the former class, 20, in the latter, 17 days; the longest, in the former, 142, in the latter, 50; the average of the former, 44, of the latter, 29 days.

This shows that out of 97 circular amputations of all kinds, 20 died, a mortality of 20·6 per cent.; while out of 41 flap, 19 died, a mortality of 41·3 per cent., or just double that of the circular, and that this excess of the mortality of the flap over the circular prevailed in all classes of amputations. More extensive data are required, however, to prove beyond question that this excess is constant, and, if so, clinical observations must be called in to show the cause upon which it depends. It may be conjectured that sloughing of the flaps would be a frequent cause of death after the flap operation; but our data do not entirely bear out this idea, nor are we prepared, at present, to point out any decided difference in the causes of death after the two kinds of amputation. The list of flap amputations comprises 8 in which the flaps were formed after Mr. Teale's method—by the rectangular incision. In several of these cases the long flap sloughed, and 3 out of the 8 cases proved fatal. It should, however, in justice to the respected author of this operation, be remarked that some of these patients were in bad health at the time of operation. The flap operation appears (especially in the thigh) to have some advantage in respect of rapidity of cure.

Influence of Sex.—Of the 149 patients comprised in these tables, 118 were males, and 31 females. The mortality was 34, or 28·8 per cent., of the former, and 7, or 21·9 per cent., of the latter. If we remember that males are far more frequently the subjects of traumatic amputations, and that these are far more fatal than operations for disease, we shall come to the conclusion, probably, that females bear the operation worse than males. Of the whole number (34) of traumatic amputations, only 2 were performed on females.

Influence of Age.—For the purpose of estimating the influence which age exerts on the mortality, the cases may be divided into four groups: those occurring in childhood, or below the age of 15; in youths, or from 15 to 25 years of age; in adults, between 25 and 60; and in advanced life, beyond the age of 60.

In children, below the age of 15, we find 18 operations, of which 2 died; but as one of these was the result of other and necessarily fatal injuries, it would be more correct to exclude this case, and say that of 17 operations, 1 died of pyæmia.

In youth, 45 operations are recorded, of which 6 died, or 13·3 per cent.

In adult age, 80, 31 of which died, or 38·7 per cent.

In old age, 6, 2 of which died, or 33·3 per cent.

Thus we see that in children amputation is ordinarily successful; the only death recorded, excluding the case above referred to, was in a strumous boy on the limits of the prescribed age, with abscess in the knee-joint. In youth the proportion of deaths is far less than in adult age. In old age, there is no reason to conclude that the patients, *cæteris paribus*, bear the operation worse than adults, but our figures are too small to draw any conclusions.

The Causes of Death.—The total number of deaths was 41. The assigned causes of death are as follows:—

Pyæmia	in 24 cases,	or 58·5	per cent.
Exhaustion (without hæmorrhage) ..	in 7	,,	or 17	,,
Exhaustion with secondary hæmorrhage ..	in 4	,,	or 9·7	,,
Visceral disease ..	in 4	,,	or 9·7	,,
Diffuse inflammation and gangrene ..	in 1	,,	or 2·4	,,
Other injuries ..	in 1	,,	or 2·4	,,

In 9 cases no post-mortem examination was made; of these the causes assigned from the symptoms during life, were—Pyæmia in 5 cases, exhaustion in 3, and secondary hæmorrhage in 1.

Thus, it will be seen that in our experience, pyæmia occupies a much larger space as a cause of death, than in Mr. Bryant's table; while exhaustion (without secondary hæmorrhage) is proportionately diminished, appearing as 17 per cent. only, while in the Guy's Hospital records it stands for 33 per cent. of the fatal cases. In Mr. Bryant's paper, no mention is made of the authority on which his statements rest; whether all or what proportion were examined after death, whether the cases produced include all the operations during a certain period, and if so, what period, with other interesting particulars. Thus, in this instance, it would require very strong evidence to convince us that one out of every three fatal cases of well-selected amputations died of mere exhaustion.

If we separate the amputations, on Mr. Bryant's plan, into "Pathological," "Amputations of Expediency," "Primary," and "Secondary," we find the causes of death in each class as follows:

Of 94 "Pathological Amputations," 24 died, the causes of death being—

Pyæmia	14 or 58·3	per cent.	of the fatal cases.
Exhaustion ..	3 or 12·5	,,	,,
Secondary hæmorrhage	2 or 8·3	,,	,,
Visceral disease	4 or 16·6	,,	,,
Gangrene from diffuse inflammation	1 or 4·2	,,	,,

Of 21 "Amputations of Expediency," 5 died,—3 of pyæmia, or 60 per cent.; 1 of exhaustion, or 20 per cent.; and 1 of secondary hæmorrhage, or 20 per cent. of the fatal cases.

Of 25 primary amputations, 9 died,—5 of pyæmia, or 55·5 per cent.; 1 of secondary hæmorrhage, or 11·1 per cent.; 2 of shock, or 22·2 per cent.; and 1 of other injuries, or 11·1 per cent.

Of 9 secondary amputations, 3 died,—2 of pyæmia, or 66·6 per cent.; and 1 of exhaustion, or 33·3 per cent.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

CONDUCTED BY
JONATHAN HUTCHINSON,
Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital,
AND BY
J. HUGHLINGS JACKSON, M.D.

ON CASES OF
RECOVERY FROM TRAUMATIC TETANUS.

Some years ago we published a considerable series of cases of traumatic tetanus, most of them having especial reference to certain points in the prognosis and treatment of that disease. The general remarks upon that series may be found in the *Medical Times and Gazette* for June 17, 1854, p. 619. Since that time the treatment of this very interesting disease has received especial attention in our Hospital Reports, and we have from time to time recorded all the examples of recovery which have come under our observation. The last of them was one under the care of Mr. Coote, in St. Bartholomew's, which we recorded a fortnight ago. Thinking that it might

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not be without interest to many of those who peruse our Reports to be able easily to compare these cases, we have this week collected them in a tabular form. This table comprises, we believe, all cases mentioned in this Journal during the last six years, and includes several which were not given in our Hospital Reports, and one or two which were quoted from other serials. We have excluded several cases in which the disease was either of a bastard type, or in which there was no history of traumatic cause. It may at first sight appear a very encouraging fact that so many as twenty-two cases of recovery from traumatic tetanus should have been published in one journal during so short a period. It must be remembered, however, that they are collected from a very wide field, and, after all, constitute but a very small per-centage of the cases which have occurred. Still, they do constitute a fact which ought to encourage us to the still more persevering study of the disease, and also to the yet more scrupulous and hopeful perseverance in the detailed management of every single case which may come under our care. Although we cannot as yet point to any special plan of medication and say that it is proved to be the best, yet certain broad rules for our guidance have been established, and that even very severe cases do every now and then get well is an undoubted fact.

TABULAR STATEMENT OF TWENTY-TWO CASES OF RECOVERY FROM TRAUMATIC TETANUS.

N.B.—The date appended to each case refers to the Number of this Journal in which the case will be found recorded at length.

No.	Name, Hospital, Surgeon, &c.	Age.	Nature of Injury.	Interval between Injury and First Symptoms.	First Symptoms.	Treatment.	Progress. Degree of Severity.	Whole Duration.	Remarks.
1	Henry A.; Mr. Bateman; Folkestone; [May 2, 1857]	12	Injury to two fingers	9 days	Stiffness of jaws	By opium; for a fortnight he took 3ij of tincture of opium and 3j of chloroform daily	Severe and well-marked	21 days	Twenty-one days was the period during which the disease was well-marked; he had afterwards a slight relapse
2	John A.; St Thomas's; Mr. Simon; [July 31, 1858]	32	Wound of the palm by a scythe	14 days	Stiffness about the jaws	By nicotine	Severe and well-marked	About 15 days	A month later he was quite well
3	Richard D.; Guy's Hospital; Dr. Wilks and Mr. Cock; [July 3, 1858]	18	Wound of sole of foot by a nail	14 days	Feeling of tightness about the mouth and neck	By Cannabis Indica. Neither Dr. Wilks nor Mr. Cock attributed the recovery to the drug	Severe	About 25 days	Large quantities of wine and beef-tea were taken. The early symptoms had been of slow development
4	Cornelius M.; the London Hospital; Mr. Curling; [July 31, 1858]	45	Injury of the foot; the soft parts on the dorsum were lacerated, and the first and second metatarsal bones were fractured	16 days	Risus and stiff neck	Opium and etherisation	Severe	About 15 days	In this case the inhalation of ether appeared to have been decidedly useful
5	A man; Dr. Th. V. Dusch; Mannheim; [May 14, 1853]	26	Wound of the great toe by a nail	15 days	Trismus, followed in three days by opisthotonos and tetanic spasms	Morphine bleeding, tobacco enemata, cupping, etc., were tried without avail; subsequently, chloroform was used, and between May 5th and May 20th, sixty-four and a-half ounces were used	Severe	About 33 days	In this case decided benefit was obtained from the use of chloroform
6	A young man; Dr. F. J. Lowes; Gosport; May 21, 1858	..	Laceration of muscle of arm and comminuted fracture of the humerus from a gunshot wound; the arm was removed	20 days	Pain and stiffness in neck, followed three days later by tetanic spasms	Chloroform, opiates, and purgatives	Severe	About 30 days	Dr. Lowes considered that the chloroform inhalations had been the most effective agent
7	A boy; The London; Mr. Critchett; [August 27, 1859]	..	He had fallen and hurt his back; only a small bruise was to be seen; no history of any previous injury	1 day (?)	..	Conium, stimulants, and chloroform	Severe and well-marked	..	Out of danger on the fourteenth day
8	Robert H.; Sheffield Infirmary; Mr. Gregory	18	Lacerated wound of the thigh	23 days	Pain and stiffness in jaws and neck	Calomel and opium were given at first; subsequently, chloroform was used	Severe	About 19 days	Stiffness and spinal curvature remained for some time afterwards
9	Benjamin D.; Bristol General Infirmary; Mr. Lansdown; [May 20, 1854]	21	Amputation at the ankle-joint	14 days	Pain about the lower jaw	Opium and by etherisation	Sub-acute	23 days	
10	Patrick R.; Liverpool Southern and Toxteth Hospital; Dr. Petrie	16	Scalp wound	17 days	Rigidity of the muscles of the neck, and the head thrown back	Treatment by opium and purgatives	Sub-acute	21 days	
11	A man; Guy's; Mr. Cock; [April 29, 1854]	18	Crushed forearm; on the thirteenth day, mortification having taken place, the arm was removed, the ligaments of the elbow-joint and the median nerve only requiring division	19 days	Stiffness about the jaws	Quinine	Chronic trismus; he had no tetanic spasm in the limbs; very little pain, and but slight rigidity of the abdomen	..	The disease gradually abated after the eighth day
12	A boy; The York County Hospital; [April 29, 1854]	4	Burn over neck, chest, head, and side	9 days	Spasmodic closure of the jaws	Four grains of sesquioxide of iron with two of Dover's powder every four hours	Severe	14 days	

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No.	Name, Hospital, Surgeon, &c.	Age.	Nature of Injury.	Interval between Injury and First Symptoms.	First Symptoms.	Treatment.	Progress. Degree of Severity.	Whole Duration.	Remarks.
13	George W.; York County Hospital; Mr. Russell; [April 29, 1854]	40	Lacerated wound of the back of the thigh	12 days	Stiffness about the neck and jaws	Tonics; tincture of Indian hemp was given at bedtime, andwhen the spasms were present chloroform was used	It was never severe; the spasm affected the injured leg only: the other limbs were not affected	2 months	The chloroform seemed merely to alleviate the spasm, but not to prevent recurrence
14	Adolphus F.; the Bedford General Infirmary; [May 6, 1854]	4	Injury to the left forefinger, followed by gangrene; the finger was amputated	13 days	Stiffness about the jaws	Chloroform inhalations, mercurials, and, subsequently, belladonna	Chronic, but for some days severe and well-marked	3 weeks	Twelve days after his admission he bit his tongue; the date of the first symptom is, however, calculated from the injury
15	Richard S; the Liverpool S'thern and Toxteth Infirmary; Dr. Petrie; [June 10, 1854]	15	Crushed hand	16 days	Stiffness about the jaws	At first, quinine and opium, and, subsequently, chloroform and mercurial inunction	Chronic and well-marked	6 weeks	The improvement took place simultaneously with ptyalism
16	A girl; St. George's; Dr. Bence Jones; [August 27, 1859]	7	A doubtful history of her having bitten her tongue. There was an ulcer under the tongue	10 days (?)	Rigidity of the muscles of the jaws	Stimulants and the moderate use of opium	Severe	21 days	She was kept in the Hospital a month after recovery from the tetanus, and discharged in good health
17	A school girl; St. Thomas's; Dr. Bristowe; [April 2, 1859]	8	Graze of the right knee; she said there had been some glass in it	1 week	Risus and stiffness of jaws	Colchicum, iodide of potassium, mercurials, and purgatives; relief was obtained by leeches between the scapulæ	Moderately severe; general rigidity with scarcely any paroxysms	34 days	Of the thirty-four days she was during the greater part merely suffering from slight rigidity, which did not prevent her getting about the ward
18	A woman; Dr. Taramelli; Milan; [June 11, 1859]	38	Lacerated wounds	16 days	..	Chloroform: less than eight ounces were used	..	..	..
19	Ruth H.; Mr. Sanger; Alfreston; [August 21, 1852]	21	Wound of the palm by a prickle of furze; great pain and suffocation followed	11 days	Stiffness about the jaws	Quinine and purgatives	Trismus	About 18 days	The abdomen felt very hard; there seemed to be no paroxysms
20	Henry W.; Mr. Dakers; Ardwick and Ancoats Dispensary; [Jan. 30, 1858]	32	Contused finger; on the fourth day of the disease it was amputated	6 days after admission	Spasm of the muscles of the jaws	At first, tonics; chloroform inhalations; lobelia inflata; mercurials; ointment of aconitina was rubbed along the spine; blisters to the spine; Indian hemp; aconite, conium and hydrocyanic acid; turpentine enemata	Severe	15 days	It is doubtful whether he was admitted on the day of the accident, so that the date in the fifth column is uncertain
21	A woman; Mr. Spencer Wells; [Dec. 3, 1859]	41	Ovariotomy	14 days	Trismus	Six grains of extract of woorara were used "hypodermically and epidermically" in six days	..	..	The exciting cause appeared to be a draught of cold air
22	A lad; Mr. Coote; St. Bartholomew's; [March 28, 1861]	16	Crushed finger	21 days	Spasm of the muscles of the jaws	He was salivated and treated by full doses of croton oil	Severe	27 days	

A glance down the fourth and fifth columns of the table will show the reader that some of the old rules as to prognosis are quite confirmed by our present series of facts. In Cases 7, 16, 17, and 19, we have but obscure histories of only slight injuries, and the disease probably approached to the idiopathic and milder type. The fifth column shows that in almost all the cases the interval between the traumatic cause and the occurrence of the first symptoms was unusually long. In very few indeed is that interval less than ten days, and in many it is a much longer one. Those in which it was shorter are, for the most part, precisely those in which, as just noticed, there is reason to doubt whether the disease was really excited by the asserted injury or not. As it regards cases in which tetanic symptoms supervene in a well-marked form within ten days of a *bona fide* injury, there is as yet but little evidence of a hopeful nature on record. The longer the interval (or period of incubation) the better the prognosis. Amongst other circumstances and symptoms of good omen, we may briefly mention the following, which we place in the order of their estimated value:—1st. If the symptoms develope themselves slowly. 2nd. If there is little or no tendency to pharyngeal spasm. 3rd. If the pulse does not become greatly quickened. 4th. If the skin remains cool and the bowels respond to mild purgatives.

The information given in the seventh column ("Treatment") will, although very much condensed, suffice to show that the recoveries have taken place under very various plans. That the conditions to which the recovery was really due concerned rather the nature of the case than the special plan of medication is also indicated by the fact that no one of our Hospital Surgeons can claim more than a single case in the series. Only in three instances (the London, St. Thomas's, and the York County) has the same Hospital the credit of two cases. It would be quite useless to attempt any detailed investigation as to the relative influence of the different remedies used in the cases before us. It will probably serve a better purpose if we attempt a brief summary of the principal conclusions as to the treatment of this disease which the examination of these and similar facts has led us to form.

Memoranda as to the Management of Cases of Tetanus.

1. The chief objects in view are three,—to mitigate the force of the local irritation to which the disease is due; to sustain the patient's strength by food; and, lastly, by procuring sleep, to allow the nervous system the opportunity of regaining its wasted powers.

2. If the case be seen in the very onset, and if the injured part be a finger or toe, it is desirable at once to amputate, whatever may be the local condition. If the injury has been severe, and the part have passed into a state in which, whether from sloughing or otherwise, its recovery is doubtful, it is desirable to amputate at any stage of the disease, or even if one of the extremities be the part involved.

3. The injured part should be poulticed, and the limb above it wrapped in lint soaked in laudanum or chloroform.

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4. The patient should be put in a room with but one attendant, and the strictest quietude should be insisted on.

5. If the patient has been accustomed to it, he should be allowed to smoke.

6. The bowels should be well cleared out by croton oil or other efficient purgative.

7. If the skin be very hot, the pulse jerking, and the tongue red and dryish, the Surgeon may be justified in combining small doses of calomel with the narcotic he may have selected for employment.

8. A free allowance of beef-tea, milk, eggs, and similar articles of concentrated fluid nutriment should be given, more especially in the later stages of the complaint.

9. As long as the patient is able to take food and to obtain periods of comparative quiet and freedom from pain, the use of anæsthetic inhalations is not desirable. Great advantages may, however, be obtained from them if he be unable to open the jaw sufficiently to permit of taking food, or if the tetanic spasms are without remission. Ether appears to have stronger facts in its recommendation than chloroform.

10. One or other form of narcotic—Opium, Indian Hemp, Belladonna, or Woorara—should be freely used. There is no very decisive evidence as to the advantage of any one of these over the others. Respecting the Indian Hemp and the woorara, the difficulty often encountered in obtaining them in a state of reliable activity will often be an obstacle to their employment.

11. Excepting possibly in the per-acute cases the free use of quinine appears to be desirable. If given in large doses it generally reduces the frequency of the pulse, and in some cases a mitigation of the tendency to spasm has attended its influence. The rapid induction of cinchonism is a measure well worthy of a fair trial. J. H.

THE LONDON HOSPITAL.

OVARIOTOMY—DEATH FROM PERITONITIS ON THE THIRD DAY.

(Under the care of Mr. CURLING.)

Mrs. K., aged 24, a little, slim woman, of cheerful temperament, and in good general health, was admitted a fortnight ago, on account of ovarian dropsy. She had the appearance of about the ninth month of pregnancy. The tumour, which distended her abdomen, fluctuated very freely from side to side, and was diagnosed as unilocular. The integument was very extensively scarred from the effects of distension during a previous pregnancy. There was very little subcutaneous fat, the parietes being altogether remarkably thin. No gliding of the parietes on the cyst could be felt, and as there was a distinct history of attacks of peritonitis, the existence of adhesions was suspected.

The woman's history was, that she had first noticed that her body was enlarging about three years ago. She was quite sure that the tumour began in the left side [this proved to have been a mistake]. It gradually increased, but did not interfere with her general health. Eighteen months later she married, and at that time her abdomen had so far increased that her sisters were suspicious as to her condition. Within a month of her marriage she became pregnant; but her size was by this time that of nearly the ninth month. The distension was extreme towards the end of her pregnancy. Ten months after her marriage she was delivered of a living child, after a very favourable labour. She nursed her baby for some time, and it is now eight months old. A few weeks before her admission, Mrs. K. had been much pulled down by an attack of diarrhœa, which lasted several days. She described several attacks of acute pain in the abdomen, at different periods during the last year, which had been attended and followed by much tenderness. During the last few months she had lost much flesh, but her appetite and spirits remained good. She was fully aware of the amount of danger attending the removal of the tumour, but had quite made up her mind to encounter it.

Dr. Davies, under whose care Mrs. K. had been admitted, considering that the case was one suited for the radical operation, transferred her to Mr. Curling's charge, and Mr. Curling, after consultation with his colleagues, determined to perform the operation.

The Operation—Friday, March 22.—It was performed in a private ward, which had been raised to the temperature of 75°. Only about a dozen persons in addition to the operator and his assistants were allowed to be present. The patient was placed under the influence of chloroform by Dr. Mackenzie, the Resident Medical Officer. Mr. Curling divided the integuments for about four inches in extent at first, but subsequently enlarged the incision three inches upwards, to just above the umbilicus. The cyst having been exposed, it was found to be loosely adherent in front, but laterally on both sides the adhesions became much stronger. As the cyst-fluid did not readily escape by the canula, the patient was turned partially on one side, and a free incision made into the front of the cyst. No fluid whatever was allowed to come in contact with the peritoneum. The adhesions to the omentum were very extensive, but not very firm; in the right iliac and lumbar regions they were, however, exceedingly strong, and were only separated after some difficulty. The tumour proved to be connected with the right ovary. Its pedicle was of good length, and thin: it was secured by a single piece of whipcord, and the cyst was then cut away about three inches higher up. The torn adhesions showed some disposition to bleed, but there were no vessels requiring ligature. The blood having been carefully sponged from the peritoneal cavity, the abdomen was at once closed, the wound being secured by hare-lip pins. The pedicle was brought out at the lowest part of the wound, and was secured in position. The patient had borne the operation well, and had a pulse of good power when removed to bed. A suppository of ten grains of soap and opium pill was introduced into the rectum.

The after treatment, which was most sedulously watched by Mr. Bush, the House-Surgeon in charge, consisted in the cautious administration of stimulants and opiates. The woman had very little sickness, and was, indeed, tolerably comfortable during the first twenty-four hours. She had slept a good deal in the night, and had taken fair quantities of milk, etc. Not more than four ounces of brandy, and about fifty drops of the solution of the bimeconate of morphia were given during the period mentioned. On the following day her state seemed favourable, with the exception that her skin was very hot and pulse very rapid.

During the second night she rather suddenly became much worse, and appeared to be sinking; but by the use of stimulants she rallied. On Sunday she seemed a little better and was herself hopeful, though very low and exhausted. Death took place early on Monday morning, about sixty hours after the operation.

The autopsy showed most extensive peritonitis of a low form. The peritoneal surfaces were everywhere greasy with soft lymph, which showed, however, no tendency to organise. Some ounces of thick sanious fluid occupied the pelvic fossæ, more especially the right. There were no coagula. The wound and the pedicle were in a very satisfactory condition, the latter being in process of separation, and the former well united.

The cyst in this instance proved, as had been previously supposed, to be unilocular. There were no secondary cysts whatever. It had never been tapped. It had, however, evidently been the seat of repeated and severe inflammations both within and without. The obstacle to the removal of the fluid by the trochar during the operation was found to have been due, not to septa, but to the presence of a large floating false membrane, which, whenever the instrument was passed, entangled itself on the end of the canula. This membrane was of considerable strength, and much resembled a piece of thin omentum.

METROPOLITAN FREE HOSPITAL.

CASES SHOWING THE VALUE OF IRON IN ORGANIC DISEASE OF THE HEART.

(Under the care of Dr. JAMES JONES.)

In the following cases of morbus cordis, under the use of sesquichloride of iron, well-marked valvular murmurs were found gradually to diminish, and finally, in some of them, to disappear. It will be seen that in several of them the history of the case forbids the supposition that the bruit was caused by mere anæmia. No doubt, even in cases in which positive organic disease exists, the state of the blood has much to do

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with the presence and loudness of a murmur. It may easily be supposed, that in a state of spanæmia, a small obstacle might be efficient to the production of a bruit which under other conditions of the circulating fluid would cause none. It is possible, also, that certain cardiac bruits of structural origin may be removed by restoring tone to the muscular parietes of the organ. Whatever explanation the reader may prefer to account for the fact, the cases are of much practical value as forcible illustrations of the usefulness of the remedy employed.

Dr. J. Jones states that he was led to try this treatment by observing a gradual diminution, and finally a complete cessation, of a valve bruit in a case of old-standing disease of the heart which followed rheumatic fever. The patient was suffering from tubercular consumption, and the perchloride was given with a view to that disease.

Case 1.—H. M., aged 42, a porter, admitted an out-patient early in the year 1860. He was a tall, stout man; had long suffered from palpitation and oppression of the breathing. He had been an in-patient in one of the large London Hospitals, but got no relief from the treatment.

State on Admission.—Heart's impulse strong, area of dulness increased, double rasping bruit at the base, and audible along the ascending aorta; breathing much oppressed. Having become worse under treatment, he was admitted an in-patient June 2. The quiet and rest were useful to him; and at the end of a month he was discharged at his own request, to attend as an out-patient. He soon became worse again, the oppression of the breathing returned, and the ankles became œdematous.

July 14.—Ordered tinct. ferri sesquichloridi, ♏xv.; ether chloric, ♏x.; inf. quassiæ, ʒj. ter die. To continue to take a nourishing diet and a moderate quantity of stimulants. Under this treatment he steadily improved.

January, 1861.—He is now able to walk a considerable distance without fatigue, or oppression of the breathing, and his general health is greatly improved. The œdema is gone, the valve bruit is much diminished, and the tone reduced to a slight *soufflé*.

Case 2.—John R., aged 47, a shoemaker, was admitted on September 28, 1860, as an out-patient. He distinctly remembers having suffered from palpitation for more than twenty years: his mother told him that it existed from infancy; she attributed it to a fright while pregnant with him, caused by violence of her husband while drunk. State on admission:—Increased area of cardiac dulness; heart's impulse strong; double *soufflé* over base, extending less audibly up the aorta; breathing oppressed; much cough; slight expectoration. Ordered, tinct. ferri perchloridi, ♏xv., inf. quassiæ, ʒj. ter die.

November 30.—Much improved in health; *soufflé* greatly diminished; respiration unoppressed.

Case 3.—Elizabeth B., was admitted as an out-patient on September 28, 1860. She had acute rheumatism three years ago. Two years ago she was an in-patient in an Hospital for "vomiting of blood," and was there told for the first time that she had disease of the heart. State on admission:—She has frequent hæmorrhage from the bowel; no external hæmorrhoids; no enlargement of the liver; area of cardiac dulness increased; double bruit over the base; heart's impulse strong. Ordered, potas. iodid. gr. v., dec. cinchonæ ʒj. ter die.

November 2.—No better; cardiac murmurs still the same. Ordered, tinct. ferri sesquichloridi, ♏xv., inf. quassiæ ʒj. ter die.

Under this treatment the general health was much improved; the hæmorrhage became less frequent and less severe; the cardiac murmurs gradually diminished in intensity.

Case 4.—Sarah B., aged 45, residing in the country, was admitted an out-patient on December 11, 1859. She had rheumatic fever in early life. State on admission: Looks strong and ruddy, stature tall. A double rough bruit over the heart's base, audible, with diminishing intensity up the aorta. Cannot take even moderate exercise without much oppression of the breathing. Ordered tinct. ferri perchloridi, ♏xv.; aquæ, ʒj. ter die.

December, 1860.—The above treatment she found so beneficial that she continued it regularly up to this time, seeing Dr. Jones at long intervals. She is now able to take active exercise without panting or oppression of the breathing. The cardiac murmurs are nearly quite inaudible.

February 22.—Cardiac murmur inaudible.

Case 5.—Charles H., aged 59, was admitted an out-patient on May 22, 1860. On first presenting himself, he was suffering from great difficulty of breathing. The lips livid, the countenance bloated, a considerable amount of general dropsy, some albumen in the urine, a well-marked systolic bruit of the mitral valves. After some preparatory treatment he was ordered the ferri perchloridi, ♏xv.; inf. quassiæ, ʒj. ter die; ol. morrhuæ, ʒj. ter die. He steadily persevered in this treatment to January 22, 1861, at which date he was much improved in health. Dropsy gone, urine free from albumen, breathing greatly relieved, cardiac bruit scarcely audible.

February 22.—Has continued the same treatment. Feels "wonderfully well." Cardiac bruit gone.

ST. BARTHOLOMEW'S HOSPITAL.

DISEASE OF THE TARSUS—PIROGOFF'S OPERATION—RECOVERY.

(Under the care of Mr. PAGET.)

[Reported by Mr. Rogers, late House-Surgeon.]

The method of amputation at the ankle-joint, in which a portion of the os calcis is retained, and which is known as Pirogoff's, after the name of its introducer, seems to fully maintain its reputation amongst Hospital Surgeons. We recently recorded a case in which it was adopted by Mr. Bryant in Guy's Hospital, and in which an excellent stump was obtained: another occurred a few months ago at the London Hospital, in which Mr. Maunder was the operator, and which was also quite satisfactory. The following are the particulars of a recent case at St. Bartholomew's:—

William B., aged 34, admitted for disease of the tarsus. He was a moderately-nourished man, but was cachectic, and had at one time been very intemperate. He had had syphilis. He said that about eleven months before admission his foot began to swell without any apparent cause, and in a short time it became so painful that he could not attend to his work (letter carrier). He was admitted into a Provincial Hospital, where he remained six months. During his stay in that Hospital several abscesses formed on the foot, from one of which, he said, four ounces of pus were evacuated. When admitted the foot was much swollen and painful, and there were three or four fistulous openings. On introducing a probe it appeared as if most of the tarsal and metatarsal bones were diseased. To the feel the parts were like a bag of bones, softish, and broken down. The heel and the os calcis not being affected, Mr. Paget conceived it a suitable case for Pirogoff's operation.

On September 1st Mr. Paget performed Pirogoff's amputation. The tendo Achillis was not divided.

On dissection, after removal, all the bones of the foot were found diseased, except the os calcis, astragalus, and scaphoid. After the operation the man was restless and nervous, and as he had been accustomed to take morphia, he was given during the night two-thirds of a grain of morphia in three doses. He passed a pretty good night, but next day there was redness along the inner side of the leg, and some swelling of the inguinal glands. This, however, passed off, and he went on well. On two occasions he had diarrhœa, and in one of them passed some blood, but the stump did well throughout. On October 2nd the wound was quite healed, and his general health then was excellent. On October 18th he was discharged quite well, and with a very good stump.

Mr. Paget remarked that he had never seen a stump which appeared more likely to wear well.

Homœopathy in New York.—The Homœopathic College of this city recently held its "Commencement," on which occasion the President gave the following significant charge to the graduates. We need no other proof of the utter worthlessness of the system which these young men are now deemed qualified to practise:—"You need not stick alone at Homœopathy; if that will not cure, try Allopathy; if Allopathy fails, try Hydropathy; and if you are not then successful, adopt Spiritualism, or any other curative means that may be at hand." It is deeply humiliating to add, that this Institution has a charter from the State; and by its diploma places its graduates on the same legal footing as those of our best Schools.—*American Medical Times.*

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Medical Times and Gazette.

SATURDAY, APRIL 6.

AMERICAN PHARMACY.

We believe that a few details concerning the present state of Pharmaceutical Science in North America will not be without interest to members of our Profession in England. In no department of Medicine are our American brethren labouring with greater earnestness, and with prospect of greater results, than in the one above mentioned.

Although the Official Pharmacopœia of the United States has undergone no alterations or additions since 1850, Materia Medica and Therapeutics in that country have been by no means at a standstill; and we presume that the want of an authorized national Pharmacopœia, on a level with the present state of Pharmaceutical Science, must be felt in America quite as much as it is in England.

American writers on Pharmacy are many and eminent; indeed, we believe their literature in this branch of science will bear comparison with that of our own or of any other country. We need only cite the names of Doctors Dunglison, Wood, Bache, and Stillé, as writers on Pharmacy, whose works are as highly valued as they are widely known both in England and on the Continent. The most recent authority is the one last mentioned, Stillé. His great work on "Materia Medica and Therapeutics," published last year in two octavo volumes, of some 1600 pages, while it embodies the results of the labours of others up to the time of publication, is enriched with a great amount of original observation and research. We would draw attention, by the way, to the very convenient mode in which the *Index* is arranged in this work. There is, first, an "Index of Remedies," next an "Index of Diseases and their Remedies;" the former referring to the page where information about any particular article of Materia Medica will be found, the latter enumerating under the head of any disease a string of remedies which may be tried with more or less chance of success in its treatment. Such an arrangement of the indices, in our opinion, greatly enhances the practical value of books of this kind. In tedious, obstinate cases of disease, where we have to try one remedy after another, till our stock is pretty well exhausted, and we are almost driven to our wits' end, such an index as the second of the two just mentioned is precisely what we want, but what our English Pharmacopœias do not give. The indices are arranged on the same plan in Dunglison's work.

The principal drugs and their favourite combinations used in America are much the same as those used among ourselves. At the same time the American Pharmacopœia recognizes, and American Practitioners employ, a considerable number of remedies beyond those which are officially sanctioned and ordinarily employed in Englond. The remedies to which we allude are taken chiefly from the Vegetable Kingdom. Some are of very doubtful efficacy; some, on the other hand, are of acknowledged medicinal value. A few of these latter we will very briefly notice.

Geranium Maculatum (Cranesbill).—A decoction prepared from the root of this plant is often prescribed for diarrhœa in infants, and in adults whose stomachs are delicate. It is an agreeable mild astringent, without bitterness or any unpleasant flavour.

Spigelia Marilandica (Pinkroot) was recognised in the London Pharmacopœia for 1836; but somehow lost its reputation, and was accordingly omitted in subsequent editions. It nevertheless continues to be a very favourite anthelmintic in the United States. An extract and an infusion are prepared from the root. It is the active constituent of a popular domestic remedy in America called "worm tea," which consists of spigelia, senna, manna, and fennel seed.

Prunus Virginiana (Wild Cherry).—An infusion and syrup are prepared from the bark of this tree. Being a mild tonic and also a sedative (from its containing a small quantity of hydrocyanic acid), it is much used in cases of phthisis, convalescence from acute diseases, and other ailments where debility is accompanied with nervous irritability.

Cimicifuga Racemosa (Black Snakeroot, or Cohosh).—A decoction and tincture are prepared from the root. In large doses it is an acro-narcotic poison; in small doses its action is thought analogous to that of Colchicum. American Physicians have found it useful chiefly in chorea and acute rheumatism. Dr. Wood (author of "The Practice of Medicine") says positively that Cimicifuga unites with a tonic power the property of stimulating the secretions, particularly those of the skin, kidneys, and pulmonary mucous membrane. The name is said to be derived from its supposed power of curing the disease, arising from the bite of the rattlesnake. "Cimex," however, in Latin means, not a rattlesnake, but a much less formidable creature—a bug. A very full account of this plant, its physical and medicinal properties, is given in the *London Pharmaceutical Journal* for March.

Veratrum Viride (Green, or American Hellebore) is said to possess properties analogous to Colchicum and our own Veratrum Album. Since 1850 it has been much used in pneumonia, pleurisy, and acute rheumatism. It appears to be a powerful reducer of the circulation; but though it has been extensively employed, there is still great discrepancy of opinion as to its precise medicinal value.

Podophyllum Peltatum (Mandrake, or May Apple).—One of the pæoniaceæ. The rhizome is the officinal portion; but by far the most convenient form of administering this drug is its active principle, podophyllin. The dose of the latter is from half a grain to two grains. It is a very efficient purgative medicine, and may be placed, perhaps, in the same class with jalap and scammony. In the few cases in which we have ourselves seen podophyllin given, it had a most decided and satisfactory action, a dose of one grain producing in two or three stools a thorough evacuation of the immediate contents of the bowels, without griping or discomfort. Some American Practitioners use it largely in affections of the liver, regarding it almost a substitute for mercury and its preparations. Some even go so far as to call it "the vegetable calomel;" but differing from the mineral so called, inasmuch as its free use is never attended with salivation, etc. But all this wants confirmation. Many will, doubtless, say, "*Credat Judæus, non ego.*"

Such are a few of the plants—having a tolerably definite, reliable action—which are recognised by the United States Pharmacopœia, but are, probably, hardly known as medicinal agents in England. This Pharmacopœia recognises many more besides, but the greater number of them seem to possess qualities either so feeble or so indefinite, as to be scarcely worth the room they occupy: its list of "Vegetabilia," in our opinion, would bear a good deal of judicious weeding.

We will here mention a few useful Pill-Formulæ which occur in the American Pharmacopœia, but not in our own. *Pil. Quinæ* contains one grain of Sulphate of Quina. *Pil. Copaibæ* contains between four and five grains of Copaibà, the balsam being stiffened into a concrete mass with Calcined Magnesia. *Pil. Aloës et Assafœtidæ* is a very useful combination in cases of torpor of the bowels accompanied with flatulence. *Pil. Cathartic. Comp.* is a very favourite purgative pill: 10½ grains of the mass contain Ext. Col. Co., gr. iv.; Ext. Jalapæ, gr. iij.; Calomel, gr. iij.; Gambog., gr. ½. It is found to be a most valuable combination, in those derangements of the alimentary canal and general health, which are dependent on congestion of the portal system. Its ingredients,

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though numerous, are not bulky; in combination they have a less irritating action, without any diminution of their purgative power. As an evacuant, Calomel is usually given in much larger doses by American than it is by English Practitioners.

For the various forms of disease characterised by periodicity, Quina is their sovereign remedy. From extensive observations (a) made in the United States Army on the effects produced by the administration of this medicine in large doses, there seems no doubt that its action on the system, in doses of ten grains and upwards, is sedative, and not excitant. M. Briquet, of Paris, it will be remembered, some little time back, arrived at the same conclusion. In the continued, non-intermittent fevers, Quina has been extensively tried by American Practitioners, with results somewhat discordant, but sufficiently uniform to prove, beyond all doubt, that it can neither cut them short nor essentially modify them in any way. Quinoidine is occasionally used as a substitute for Quina. According to Dunglison, it has "nearly the same amount of anti-periodic power as the Quina, while it is much less costly."

Dr. Acland, of Oxford, on his return from America with H.R.H. the Prince of Wales, showed us several different specimens of "sugar-coated pills," prepared by an eminent firm in New York. The coating of each pill is perfectly smooth and about one-twelfth of an inch thick. It appeared to us to be composed of sugar and some other substance, for it was far less brittle and less readily soluble than it would have been if made of sugar alone. The advantage of such a coating is greatest, of course, when the ingredients of the pill are offensive to the smell or taste, or both, as in the case of assafœtida, copaiba, etc. If retained in the mouth for a few moments the stimulus of the sugar excites such an abundant flow of saliva as to render their deglutition easy and agreeable without the need of any other fluid to wash them down. Further, the coating, while it preserves the ingredients from the action of the air, prevents their getting dry and hard by evaporation of moisture. Another advantage they derive from the coating is that they can, if needful, be carried loose in the pocket. The firm alluded to keeps all the pills of the Pharmacopœia coated in this manner. They are prepared with steam machinery by tens of thousands, and sold in wide-mouthed bottles of all sizes.

Dr. Acland likewise showed us samples of various concentrated organic medicines, which he brought from New York, such as Geranin, Cimicifugin, Senecin, Podophyllin, Sanguinarin, and about a dozen others,—in the form of coloured powders. Each of these medicines is stated to be *not* what its terminology would lead us to suppose, viz., *the one* active principle of the plant from which it is derived (as atropina is of belladonna, aconitina of aconite); but the embodiment in a concentrated form of *all* its known active principles. In other words, each is said to be a *concentrated equivalent* of the medicinal constituents of its crude plant. The manufacturers of these preparations argue that when several medicinal properties are possessed by a plant, as is often the case, it is reasonable to suppose that these properties respectively reside in separate and distinct proximate principles, and that we must not regard them as concentrated in a single principle. Accordingly they profess that, in each of these concentrated medicines, the several therapeutic principles of the plant (alkaloids, resins, neutrals, etc.) have been isolated singly, deprived of all foreign admixture, and then recombined (unchanged in composition) in the same number and proportions as they previously existed in the plant.

The advantages of organic remedies in this form—as compared with the ordinary modes of exhibiting them, such as infusions, decoctions, etc.—are uniformity of strength, greater certainty of action and convenience of administration, and the capability of preserving their properties unimpaired for a much longer time. Also, being divested of all extraneous, inert matter, they are *purely* medicinal. This certainly cannot be said of ordinary infusions, decoctions, extracts, etc., which most necessarily contain a great deal of non-medicinal matter, and, however carefully prepared, can rarely possess uniformity of strength, because the therapeutic constituents of plants vary considerably, according to the circumstances under which they are grown.

Whether or not these concentrated medicines are really what they profess to be,—*i. e.* whether each one embodies all the proximate Medicinal principles of the plant from which it is derived, — can be determined only by careful chemical analysis. The method said to have been pursued in their preparation certainly involves the highest degree of pharmaceutical knowledge, as well as the nicest subtlety of chemical manipulation. For the manufacturers maintain that in each plant they have accurately ascertained the several medicinal principles and the proportions in which they exist; secondly, that they have isolated these principles from all other inert constituents, and re-combined them, unchanged in composition, in the same number and proportions as they previously existed. We would, however, observe that it would not do to apply this principle in the case of all the plants in Materia Medica. In many cases we want not *all* the medicinal constituents, but only a single one; for instance, in Cinchona bark and Opium there exists a great number of proximate active principles, but the only ones we usually want are, in the one Quinine, in the other Morphia.

Whether or not, in the next place, these medicines possess the full therapeutic properties of their respective crude plants, clinical observation of their effects will alone show. One thing, however, is certain: that in bringing chemistry to bear upon the crude organic articles of Materia Medica, and in endeavouring to present them to Medical men divested of all extraneous admixture, more definite, reliable, and uniform in strength than those they at present possess, the American Pharmaceutists are at least labouring in the right direction. Could Medical men always secure reliable drugs, unvarying in quality and strength, one grand cause of uncertainty in the treatment of disease would be eliminated.

(a) Statistical Report on the Sickness and Mortality in the Army of the United States from 1839—1855. Washington: 1856.

THE WEEK.

Our readers will peruse with natural curiosity the very interesting account given by our Liverpool Correspondent of the Fever imported into that town from an Egyptian vessel, which has given rise to rumours of the dreaded Plague in the newspapers. We may be pardoned, perhaps, for alluding to this letter as another proof of the advantages possessed by our readers in consequence of the wide range of our correspondence. No sooner is any question of Medical interest started than we are able to supply such an immediate and authoritative statement of the facts of the case as is necessary for any one to form a correct judgment upon. Some of our readers may not go so far as our Correspondent does in admitting the omnipotence of mere dirt and overcrowding in the origin of a contagious fever. They may believe that the poison of typhus is as material an agent as the poison of small-pox; but they have the facts before them on which our Correspondent's judgment is founded, and on which our readers may found their own. It seems quite clear that a contagious fever has spread from a ship arriving in an English port, to inhabitants of that port who have gone on board the ship, and also to others on shore. This is exactly the danger against which Quarantine regulations are framed to protect our people. But it is left to the *pilot* (!) who brings a ship into port to report whether a ship is in a healthy state. In this case

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he did not report; but he died himself of the fever. It is quite clear that in all our large ports there should be a Medical Police—or a Quarantine Board, if the old term must be used—to secure the public safety, by taking the necessary measures for preventing the extension of contagious disease from the crews or passengers of ships arriving in harbour to the healthy inhabitants ashore.

The Council of the Royal Medical Benevolent College appear to have fared neither better nor worse than other people do in their choice of an architect and in the adaptation of their building to the wants and health of the inmates. No building of the size is ever reared without some sanitary defect, nor do we suppose that things will be otherwise till the entire subject of drainage, ventilation, light, space, and other appliances for health, are thought equally important with a picturesque site and architectural embellishments. It is not surprising, therefore, that complaints have been raised as to the healthiness of the College, that the question of drainage seems to have been postponed till rather a late date in the arrangements, and that the system of cesspools provided at first should have required alteration, which was, as we are informed, effected by the well-known engineer Mr. Bazalgette. But, as we learn from statements which have been submitted to us, the College was still considered capable of improvement in a sanitary sense. One parent, at least, wrote to the Managers, and was by no means comforted by an assurance he received from the venerable President, that "fifty years' experience had convinced him that there was no connexion between cesspools and disease." At last, on the occurrence of a second (or third?) outbreak of scarlatina, one or more members of the Managing Committee invited Dr. Aldis to visit and inspect the College, and give a report on its present state, with suggestions (if any) for its improvement. Dr. Aldis accordingly accompanied the Visiting Committee in an inspection on March 12, and sent in a report, which now lies before us, and of which the pith is this. The number of scholars is 152, besides 20 day scholars. Up to March 12, the number of cases of scarlatina has been 26, of whom 10 are in the Warden's house. There is a conflict of evidence as to whether the present is the second or third invasion of scarlatina. On this occasion the disease seems to have been introduced by a boy who arrived after Christmas. The disease, therefore, did not originate in the College, but "there are circumstances," says Dr. Aldis, "connected with the construction of the building which would favour the spreading of any epidemic when once admitted." The accommodation for the sick is insufficient, and a sick ward, or infirmary, is necessary. Some of the boys' bedrooms in the Warden's house are dirty, and require the paper to be stripped off and paint or colour substituted, as cleaner, and less liable to harbour vermin. The ventilation should be improved by providing channels for the entrance of air, and an Arnott's valve for its exit. The dormitories in the College are clean and in good order, except that the ventilation in two of them might be improved, and in none should bedsteads be placed before the fireplaces, so as to hinder the current of air. The schoolroom is utterly inadequate for the wants of the scholars, there being not more than 200 cubic feet of space for each boy, according to data furnished by the architect, Mr. Elkington. "On entering the room," says Dr. Aldis, "I perceived a most nauseating acid smell, which always occurs in overcrowded dwellings, and is favourable to the origin and spreading of zymotic disease. When we consider that so many human beings are confined within this limited space several hours of the day, and that many of them sit there from seven until nine in the evenings at their lessons, inhaling this pestilential air combined with the products of combustion of twelve gas lights, it is only surprising that some severe malady has not appeared sooner. The library and second class-room were very close and dirty." The water-closets were in good order, except one belonging to the female servants; the cesspools should be emptied oftener, and be abolished if possible. The water-tank in the tower was uncovered and dirty, and should be cleansed once a-quarter, instead of once a-year as at present. There are only two baths on the premises, but the Council intend to construct a larger plunge bath. Such is the substance of Dr. Aldis's report, of which we can only say that it is business-like and temperate, and that it would be a happy day for parents if every school were submitted to similar scrutiny once a-year and the result made public. But it will scarcely be believed that the Council of the Royal Medical Benevolent College positively refused to receive or look at this report, because it seems to reflect on their management. It is but due, therefore, to the independent members of the Council to make it public. If the allegations are untrue, they can be refuted. If true, the common sense of the Profession will require that what is necessary for the health of the boys shall be done forthwith; and the Council need but ask to have plenty of subscriptions for a new school-room. We repeat emphatically what we said at first, that it would be absurd to throw the blame of sanitary errors on the Council, because these errors are universal in all new institutions; but the Council will be severely and justly censured if they refuse to rectify errors which are pointed out to them.

A case was decided at the Marylebone Police-court, on the 21st ult., which threatens to be a very unfortunate obstacle to the various sanitary officers of the metropolis. We shall point out the full bearings of the case hereafter, but may state the main facts here. The Vestry of St. Marylebone took out a summons against Mr. Neal, of 18, Edgeware-road, for causing a nuisance at No. 33, Upper Seymour-street. The facts are, that the houses in the Edgeware-road, from No. 13 to 28 inclusive, are all drained by a common drain, which runs along their back, and then passes under No. 33, Seymour-street, into a sewer in Seymour-street. This drain was stated to be unfit for its purpose, choked with 17 inches of soil, and in a most offensive and dangerous condition. The Vestry desired that the several owners of the premises should construct each a separate drainage into the sewer in the Edgeware-road. One of them, Mr. Neal, refused: hence the summons The magistrate said he had no power to order all these houses to be drained afresh, because of the nuisance at No. 33, Seymour-street, and recommended the old drains to be repaired, and the nuisance abated in that way, which the defendants were willing to do. The effect of this decision (if final) is to postpone for a whole generation the effective reconstruction of the house-drainage of the older parts of London.

We have received the Report of the "County and City of Cork Medical Protection Association" for the year ending March 16, 1861, and are delighted at the evidence it affords of the energetic condition of the Profession in Ireland. The Association seems to concern itself with everything which promotes the welfare of members of the Profession, and which tends to raise the whole body in public estimation. The members set on foot subscriptions for the relief of the widow and orphans of one of their colleagues; they move their Representatives in Parliament to promote a General Registration of Births, Marriages, and Deaths in Ireland; they advocate the direct representation of the Profession in Parliament; they support their brethren in their claim for better remuneration for Poor-law and Dispensary services; they protect them from vexatious and unwarrantable accusa-

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tions of malpractice or neglect, and endeavour to repress the marauding practices of illegal pretenders. On the last head they lament the defects of the Medical Registration Act.

A most fearful murder was committed at the Militia Barracks, Kingston, on Tuesday, the 26th March. Martha Bradish, the wife of a sergeant, described as a tall, powerful, and plain-looking woman, 46 years of age, murdered her step-sister, a fine young woman of 20, by nearly cutting her head from her body with a razor. The thing was done early in the morning, suddenly, and without apparent provocation, whilst the victim was sleeping. There is no evidence of jealousy, which is the cause that naturally suggests itself first. There seems, on the other hand, to be some evidence of insanity, or mental depression and disease of the liver. She said to Mr. Cory, the Surgeon, "Oh, Doctor, if I had had your advice this would not have happened." She is said to have had sleeplessness, visions, and headaches. It will be interesting to watch the evidence given at the trial, and to see whether this excuse for the unhappy woman is developed and substantiated.

Colonel Weller, in a letter to the Lord Mayor, gives some terrible details of the sufferings of the Indian population in the famine of 1837-38 :—

"The bark of trees was extensively removed and used as food. Men, women, and children might constantly be seen picking out grains, etc., from the dung of cattle, and greedily eating them. Instances occurred where the entire population of villages, numbering even 500 souls before the famine, wholly disappeared. The roadside ditches, wells, and pools or rivers were crowded with dead bodies. The people lived until every particle of tissue in their bodies was so utterly absorbed, that even the lice with which they were often covered, had died from want of nourishment, and were left mere shells, of which I saw many instances. I saw also many times on leaving my tent in the morning, children lying upon the breasts of their mothers who had died during the night, alternately trying to coax them for nourishment, or becoming enraged and beating the poor corpses on the face or breasts. Instances of cannibalism were by no means uncommon ; and the most respectable Hindoo families supported life by eating cow's flesh, than which nothing could be more abhorrent to the feelings of a Brahmin."

Our readers scarcely require to be appealed to to promote the operations of the Census enumerators on Monday next to the utmost of their power. But we insert the following passage, for its intrinsic interest, from a "Memorandum on some of the Objects and Uses of the Census of 1861," circulated by the Registrar-General :—

"The population of Great Britain was estimated at 7,392,000 in 1751. Manufactures and the large towns increased, but emigration was commencing, and some country villages were deserted. Goldsmith sang :—

> "'Ill fares the land, to hastening ills a prey,
> Where wealth accumulates and men decay ;
> Princes and lords may flourish or may fade,
> A breath can make them, as a breath has made ;
> But a bold peasantry, their country's pride,
> When once destroyed, can never be supplied.'

And Dr. Price contended that there was an absolute decay of the population. This gave rise to a protracted controversy, which, in the critical state of the country, it was important to settle. The population of Great Britain was then enumerated in 1801, and amounted to 10,917,000, and with that of Ireland united with her made above 16,000,000. This was a triumphant reply to the doubts of those who despaired of their country.

"Notwithstanding the war the population increased, as the Census showed, at the rate of two to three millions every ten years until 1841. Then immense emigrations took place; there was a depopulating famine in Ireland, which had an imperfect Poor Law, and cholera was epidemic ; yet the population of Great Britain was augmented by 2,308,000 ; and, although the population of Ireland fell off, the people of the United Kingdom amounted to 27,724,000 in 1851.

"Since that date there have been great emigrations and an epidemic of cholera ; but the marriages have increased, the births have exceeded the deaths, and the mortality of the towns has been diminished by sanitary measures. An increase of the population may be expected ; but its extent and the particular classes which have increased or declined, in towns or in the country, can only be determined by the Census to be taken on the 8th of April.

"The *number of Souls*, in the expressive language of the old writers, will then be known, and will remind the nation of the extent of the institutions for the advancement of education, religion, and justice, required to keep pace with its numbers.

"The information which the Census supplies admits of innumerable practical applications. It is absolutely necessary for determining the state of the public health ; and by pointing out the immense variations in the rate of mortality, and the intensity of diseases under different circumstances, will lead to the removal of the real causes of national suffering and decay."

Statements have appeared in the *Times* from which it appears a great increase may be expected in the production of silver. It is said that the metal exists in immense quantities, in the form of a natural oxide, in the neighbourhood of the metallic deposits, and that a ton of ore, which formerly yielded 13 ounces of metal, may, by an improved and inexpensive process, be made to yield from 54 to 216 ounces. There are in Cornwall millions of tons of gozzans, containing silver, the extraction of which in this country does not pay unless it yields 10 to 12 ounces ; and that as much as 54 ounces can be obtained by the new process, which, besides yielding an enormous profit to the capitalists, will open a field of productive industry for hundreds of labourers.

We are glad to find that petitions will be presented to Parliament against the 43rd section of the Government Bill to "Regulate the Registration of Births, Deaths, and Marriages in Ireland." It is quite intolerable that the Medical Profession should be called upon to render important Professional services to the public, not only without reward, but under the threat of a penalty if those services are not rendered gratuitously. No Government would dare to introduce such a clause if there were a few Medical men in the House of Commons.

A poor woman named Salmon, residing at Edwardstone, near Sudbury, has murdered two children by drowning, and attempted the life of a third. It is said that she has been in a state of nervous excitement and hypochondriasis for some months.

At the Southwark Police-court, on Monday, Dr. Challice appeared to complain against a butcher for exposing for sale the carcases of calves which seemed to have died a natural death. The defendant said that worse meat was sold daily at Newgate-market ; nevertheless the magistrate ordered it to be destroyed.

Before this number is in the hands of many of our readers, the discussion as to the proposed amalgamation of the Medical Societies will take place at the Medical and Chirurgical Society. We shall give a full report next week. In the meantime we may express the hope that no matters of detail, or of personal interest, will be allowed to influence he decision of a great public question, but that the aim of

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all will be to do that which is best—not for themselves, or for any branch society—but for Medical Science.

At the Norwich Assizes, a girl of 14, servant to a farm bailiff, was tried for attempting to poison her master and mistress with blue vitriol, which she put into the kettle before breakfast on several occasions. The symptom produced by the poison was intense sickness. The girl was acquitted on technical grounds.

Sir J. H. D. Elphinstone, in a letter to the *Times*, follows up the question raised by Mr. B. Johnstone, the week before last, in the House of Commons as to the salubrity of the training-ship *Britannia* at Portsmouth. He states that 200 boys are received on board this ship, which is anchored near a mud-bank uncovered during two-thirds of every tide, and giving off exhalations which cannot be considered wholesome; and advocates the establishment of a Naval Training College on shore.

REVIEWS.

On Gout: its History, its Causes, and its Cure. By WILLIAM GAIRDNER, M.D. Fourth Edition. 8vo. Pp. 430. London: 1860.

THE first three chapters of this book contain the usual stories of red-legged cardinals, Venetian doges, country squires, statesmen, of renowned warriors and meek philosophers, who suffered gout after their fashion, and treated it in various ways. Since Morgagni, these stories have been the spice and garnish of most books on gout.

Then comes the fourth chapter, mainly devoted to a consideration of the theory of morbific matter, of uric acid in the blood, of Dr. Garrod's doctrine, and of additional detail. The result of these considerations is that the author "cannot look on the disappearance of urea and uric acid in the urine, and their accumulation in the blood, as anything else than a very frequent symptom and consequence of gout," etc. (P. 111.) Since the case of Morichini, whose urine was all transformed into lemon-juice after he had taken a draught of it, such a pathological change in urine has not been observed. But the author outdoes even Morichini in his chemical analyses. Dr. Garrod says that gouty blood contains uric acid; Dr. Gairdner says healthy blood contains it also. Here is his proof:—

"I had the curiosity to submit the blood of this child [a boy four years of age, bled for an acute attack of bronchitis] to the same process described by Dr. Garrod, and found in it indubitable traces of uric acid. The quantity of serum was so small,—not much exceeding an ounce,—that no crystals were obtained; but, on exposing the residue to the vapours of ammonia, the red colour, indicating the presence of urates, was very plainly perceived."—(P. 102.)

It has rarely been our lot to meet with so illogical a conclusion and so frivolous an assertion of a would-be chemical test. Dr. Garrod's process yielded no uric acid. Consequently, uric acid may fairly be considered as absent. Neither uric acid nor water become red with the vapours of ammonia. If the author had obtained crystals after the manner of Dr. Garrod, isolated them, treated them with nitric acid in the usual manner, and then, on exposure to ammonia, had obtained a purple colour, his assertion might have been colourable. As it stands, this indubitable "opinion, now founded on fact," "that uric acid is a necessary and constant ingredient of pure and healthy blood," is a most unfounded fiction.

These features of the fourth chapter prepared us for much in the fifth.

P. 121 details the steps of a curious urinary analysis, some fruits of which appear on p. 123. These proceedings are bad in principle and faulty in every detail, and the deductions drawn from their results have not the slightest value. P. 126 reiterates with more theoretical and hypothetical flourish the fiction of the regeneration of uric acid from urea. This fiction is continued to p. 134, where it comes to a culmination, with the statement that the urates originated in retained urea.

The sixth chapter exhibits the author in a puzzle. He has boiled urine with copper and potassa, and on standing exposed to the air the sub-oxide became oxidised and re-dissolved with a blue or green colour. He forgets that sub-oxide may be in solution, and assumes the existence of a peculiar oxide. He forgets that ammonia would form in the alkaline urine and re-dissolve the copper, even if it were metallic. He sees what has been observed a thousand times, but forgets that tartaric acid is an ingredient of Trommer's test, and one that would have saved him all his trouble had he known how to use it.

In Chapter IX. he sets Liebig to rights with an assurance of his own superiority which is quite amusing. The most effete and rotten doctrines of Mulder are again bolstered up. On p. 192 the nutrition of plants returns to the state where it was in the last century,—humus is again the vegetable food. The author's belief that, "before entering the organism of plants, the nutrient matters of the soil are resolved into their original elements," exhibits his indistinct notion of the doctrine which he criticises.

On p. 259 we have this instructive sentence:—

"The real pathology of gout appears, then, to me, to be comprised under these heads,—an increased pressure of the blood from its accumulation in the great veins, and an altered state of that fluid, of which an increase of globulin and diminution of fibrin are the most remarkable circumstances, leading to the perversion of the nutrient principles of the blood, and the formation of sugar and uric acid instead of urea. All these results depend on too copious an absorption of nourishment or defective respiration, on deficient innervation, and on, more or less, suppression of the healthy evacuations of the liver, the kidneys, and the skin."

And on p. 261 the author puts the crown upon all his science by the following proposition:—

"Gout is due to a particular tendency of the constitution, of which no explanation can be given, which may never disclose itself, and whose nature and essence will, in all probability, remain for ever shrouded in that deep obscurity in which organised and formative structure takes its vital impulse and individual existence."

In the subsequent chapters there is much story-telling, Latin and Greek, fully proving that gout is curable. The remedies are duly discussed and their merits defined; but if all the information is not more correct than that about colchicum we are sadly afraid of the consequences. On p. 333 and p. 428, Professor Chelius is put down as an authority for the statement that colchicum causes a more copious discharge of urea from the system. The statement of Chelius referred to uric acid and not to urea, as the author imagines: it has been proved to be quite devoid of foundation by Böcker, Garrod, Schroff, and Julius Clarus.

The author's cases are well told, and if he had left science alone altogether, if he had used (p. 143) "more prudence in the application of chemistry (*sit venia verbo!*) to the use of Medical science" than he has done, if he had simply told the natural history of gout, the stereotyped and the routine treatment—that treatment which we are all obliged to admit as justifiable, and which is termed empirical—then we should not have been disposed to find fault with him; but it was our duty to show the weak points of his structure, and we hope that in his next edition he will amend them, either by the omission of the pseudo-science, or by the introduction of doctrines in accordance with the present or future state of science.

Hints on Insanity. By JOHN MILLAR, L.R.C.P. Edin. 8vo. Pp. 105. London: 1860.

THE Author of this convenient little book tells us in his preface that "the Hints have been thrown together with the hope that they may be found useful to those Medical men who have had no opportunity during their professional education of becoming practically acquainted with Insanity, and whose time is too much occupied to permit them to make a special study of a disease which they are seldom called upon to treat." This quotation fairly and honestly represents the nature of the work, in which hints of the most useful kind are given on the diagnosis of insanity, acute mania, ordinary mania, melancholia, suicide, recurrent mania, puerperal

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mania, mania from amenorrhœa, hallucinations, masturbation, general paralysis, epilepsy, dipsomania, the prevention of insanity, remarks on visiting insane patients, removal to an asylum, choice of an asylum, disposition of property, asylums (public, county, and private), forms of admission to asylums, forms of Medical certificates, who are not to sign a certificate, omissions in certificates, and facts indicating insanity. To the whole there is an Appendix, including the instructions of the Commissioners in Lunacy with reference to single patients, the removal or transferrence of patients, wandering lunatics, or those not under control, forms of certificates for admission into private asylums in Scotland and Ireland, as well as into district asylums in Ireland.

To give an outline as above of Dr. Millar's essay is fair, but to attempt to abridge the contents by quotation would be impossible, for it is a book in which not a word is lost; and while it in no way interferes with the study of more elaborate treatises on psychology, its possession secures to the Practitioner reliable and immediate information in moments of emergency, when action rather than study is the order of the day. We predict for this pocket companion a wide and useful circulation.

Suggestions Concerning the Construction of Asylums for the Insane. Illustrated by a Series of Plans. By William Dean Fairless, M.D., etc. 8vo. Pp. 28. Montrose: 1861.

These valuable Suggestions were made in the first instance with reference chiefly to the Asylum wants of Scotland; but the principles advocated are of general application, to private as well as to pauper institutions; and for this reason the author has given them a more extended circulation by publishing them. The object of the paper is to show how efficient Asylums, capable of extension at any time, can be erected at a moderate cost. The guiding principles aimed at are simplicity, economy, and efficiency, and the author clearly shows, (on paper at least,) how an Asylum may be constructed on simple and economical principles; and detailed plans are given for the realisation of the scheme which the writer has so clearly laid down. Dr. Fairless is of opinion that 350 patients is the maximum desirable to be gathered under one superintendence; but the principle of construction he describes is applicable to an indefinite number. Details of the most minute kind seem fully explained; and we heartily commend the Suggestions to the favourable notice of all who are interested in the well-being of a large and sadly afflicted section of the general community.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

AUSTRIA.

Vienna, March 19.

THE PUBLIC HEALTH.

The sanitary condition of this city, compared with that of other large towns, is so notoriously bad, that the Medical press is continually reminding the municipal authorities of the necessity of taking certain measures to improve it, which might easily be carried out, and would certainly be of great benefit to the population. In a sanitary point of view Vienna is, indeed, far inferior to Berlin, Paris, and London; if, for instance, the Thiergarten at Berlin, the Champs Elysés, and the Bois de Boulogne at Paris, and the parks of London, are compared with our Prater, the latter does not at all shine to advantage; and the same may be said of the other parts of the city and the suburbs. In dry weather storms of sand and dust are continually whirling through the air, and irritate the respiratory organs, obscure the sight, beat against the face, and set the teeth on edge; or rain renders the unpaved thoroughfares impassable to pedestrians on account of the mud; or glazed frost causes no end of fractures of the collum femoris, and the lower end of the radius. Whoever has once experienced the effects of the dust of this city, will not be surprised to hear that one-third of the deaths which occur here is due to consumption; and there can be no doubt that the great frequency of tuberculosis is not the fault of the geographical situation of the city, the atmosphere, the food, etc.; but is to be ascribed to the clouds of dust flying through the air, which are never laid by artificial irrigation, as is done at Paris, London, and in almost every town in Germany. This dust, the greatest part of which comes from those streets in which there is no pavement, and from the large cracks between the stones in the paved streets, does also give rise to diseases of the eye and skin, and to bronchitis and pneumonia. Besides tuberculosis, diseases of children and epidemics of typhoid fever are very frequent, and of a most destructive character. This is scarcely to be wondered at, if we consider that there is very little good water to be had in Vienna; that the streets are not kept clean; that there are no parks in the town, and that the drainage is in a frightful state. Add to this, overcrowding in the dwellings of the labouring poor, and a very defective organisation of the Poor-law, and it will be seen that until a thorough change is wrought in all the conditions mentioned, we cannot expect to see this city placed upon an equal footing with other capitals of Europe. The mortality of Vienna is enormous, and nearly twice as high as that of some English manufacturing towns; so that if the population were not continually renewed by immigration, our palaces would soon change into Hospitals or deserts.

PROFESSOR SIGMUND ON SYPHILISATION.

The therapeutical results of syphilisation, up to the present time, have been so contradictory, that Professor Sigmund, who has under his care all the syphilitic patients who are received into the General Hospital of this city, has instituted a new series of experiments, in order, if possible, to arrive at a satisfactory solution of this vexed question. The chief results of his researches have been, that the secondary symptoms diminish and sometimes even disappear entirely during the time that the new ulcers are forming; but that relapses generally take place within a few months; so that there is no reason for preferring syphilisation to the other modes of treatment which have been hitherto used; but considering the length of the treatment, and the annoyance and disgust caused by it to the patient and the doctor, it cannot even be thought equal to the other methods of cure. If, in practising syphilisation, we extend the inoculation over the space of one or more years, as was lately recommended by a Scotch Surgeon; or, if inoculations are as often repeated as relapses occur, as M. Sperino is in the habit of doing, it is obvious that the disappearance of the symptoms is to be ascribed to the judicious diet followed at the same time and to the natural course of the disease, but not to syphilisation.

In the course of his experiments, Professor Sigmund observed, that the ulcers cicatrise without the application of special remedies, if they are only carefully attended to. Twenty-four hours after inoculation the formation of a small pustule round the place, where the puncture with the lancet has been made, is observed. On the second day, this pustule contains a yellow, turbid liquid, in which the microscope shows the characteristic elements of pus. During the next two days the pustule increases to the size of a pea, and shows a small depression in the middle. Between the fourth and the sixth day, the pustule bursts, and pus is evacuated with more or less considerable coagula. The skin and the cellular tissue are destroyed as far as the pustule reaches; the edge of the skin is strongly marked, and the edge and bottom of the ulcer covered with pus, which closely adheres to them. Where the meshes of the cellular tissue contain much fat, the ulcers increase in depth, but where this is not the case, they scarcely spread vertically or horizontally, and the adjoining part of the skin is not undermined, unless the pus is prevented from escaping, and accumulates in consequence. So long as the pustule is in the process of formation, there is a trifling inflammation in the neighbourhood, but as soon as it has burst and the ulcer is developed, this inflammation subsides. During the second week the bottom of the ulcer is raised, red granulations are perceived, which are at first isolated and surrounded by pus, but soon become more numerous, until at last the whole surface of the ulcer is covered by them. During the third week the margin becomes flat, and the formation of epithelium begins, sometimes from one part only, in other instances from all parts simultaneously. In the ordinary course of events these ulcers are cicatrised at the close of the third, or certainly of the fourth week. The cicatrix is at first red, but afterwards it

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becomes brownish or yellow, and in a few weeks it is either of the same colour as the healthy skin surrounding it, or it is a little lighter and smoother. If patients who had thus been inoculated, were some years after again received into Professor Sigmund's ward, scarcely any traces of the numerous cicatrices were left.

The mode of treatment in these cases consisted in frequent cleaning with common water (with syringes, sponges, charpie, etc.) and dressing with charpie or linen; in keeping up the circulation, and not allowing much movement of the parts affected, so that in ulcers on the thigh, walking was prohibited, and in ulcers on the arm the latter was carried in a sling. Besides, the diet was nutritious, and the patients kept very clean. These are the conditions necessary to a successful treatment of the usual syphilitic ulcers, and the partial or total neglect of these is too often the cause of the long duration, the spreading and increasing, as well as of the complications of venereal disease. The ulcers produced by syphilisation, only then considerably extended in the skin and the cellular tissue, if they were very close to each other, if they were not well cleaned, if the dressing was tight, if the clothing and position of the affected part impeded circulation, and if the patient suffered from diarrhœa and dysenteria: in such cases even cicatrices, which had been formed some time previously, broke out again. The same circumstances generally prevent the speedy cure of the usual syphilitic ulcers, as those on the genitals of male patients are generally tightly covered by the præputium, so that the pus is not removed, and accumulates under the scurf formed by cauterisation. Besides, the dressing often communicates the pus to other tissues, and the edge of the ulcer and the parts surrounding it are excoriated and inflamed by the caustics used. These are are a few of the reasons why, in so many cases, even the best Medical advice does not succeed in effecting a cure.

In patients suffering from scrophulosis or tuberculosis the ulcers healed rather slowly; the pus adhered longer and more closely to the skin and the cellular tissue. The granulations were formed tardily, and were sometimes again destroyed after having been formed, the cicatrix was softer, and a longer time elapsed before it became quite firm; but if the treatment was as above, the diet good, and the patient did not suffer from diarrhœa, cicatrisation was invariably induced without further trouble. While the ulcers existed, in some cases inflammation of lymphatics, and in others abscesses and furuncles, were observed. Some of these patients had been treated with mercurial ointment and bichloride of mercury; others with iodide of potassium, or mercury and iodine together, before they were syphilised; but these circumstances did not at all affect the formation of pustules and ulcers, which were just the same as in those who had not been treated by either of these remedies. The average term for cicatrisation was three weeks, and the longest seven weeks, which is the same as is observed in simple venereal ulcers.

It took very little pus to render inoculation efficient. Shallow punctures proved more efficacious than deep ones, as the latter often produced no results. In the course of syphilisation the pustules and ulcers gradually became smaller, until the pustules gave no longer rise to ulcers, and at last, even if inoculation was repeated many times with pus from a fresh chancre on the same place, not even pustules were formed, although the same pus produced large pustules and ulcers in other patients. This state of immunity, however, never lasted longer than a fortnight, and in some patients in whom inoculation on the thigh did not prove successful, pustules and ulcers could be produced on the arms and the chest. In one case this state continued for months, and there was therefore never a permanent and general, but only a local and temporary, immunity from the venereal poison. Syphilised patients may therefore easily be infected afresh; and even in Paris and Turin, where at first the most sanguine expectations of syphilisation as a prophylactic remedy were entertained, this hope has now faded.

Professor Sigmund, in most of his cases, inoculated with matter from ulcers, where both the edge and the base were soft; and only seldom with pus from ulcers where both edge and base were hard; but the result was always the same, as all ulcers produced by inoculation showed a soft edge and base, and brought about a soft cicatrix. The same may be often observed in the development of the usual syphilitic ulcers, viz. that if patients already suffering from secondary syphilis are again infected, they only show ulcers with soft edge and base,—a fact which those who accept two different kinds of virus, one of which causes soft, and the other hard ulcers, are not able to render consonant with their views.

It is a striking fact connected with syphilisation, that the system generally is not at all affected by it, even if from thirty to fifty ulcers are present. The patients do not suffer from fever, and neither the general health nor any particular function is disturbed by it. On the contrary, almost all of those syphilised, with the exception of two, who suffered respectively from tuberculosis and dysenteria, increased in weight and improved in appearance. This is, most probably, solely due to the nutritious food which was provided and the carefully regulated diet. Professor Sigmund considers it a great mistake to put all patients suffering from secondary syphilis indiscriminately upon a low diet, as is constantly done; as such is only good for certain periods of the disease and exceptional cases. The rule should be to give the patient so much and such kinds of food as they are able to digest easily under the circumstances of the treatment.

In most patients the symptoms of secondary syphilis return after a few months; in a lesser number after a year or so. The decrease and disappearance of the secondary symptoms after syphilisation began at a period varying from three to eight weeks, just as is the case with secondary syphilis, if it is left undisturbed; and even then, only the symptoms affecting the skin and the mucous membranes disappear, while the general intumescence of the lymphatic glands either remained quite unchanged or was only diminished in a trifling degree. Professor Sigmund considers this to be the first essential symptom of the distemper, and also the most positive sign that it still exists. A careful examination of the different cases shows that if this general swelling of the lymphatic glands is absent in patients who, to all appearance, are syphilitic, the cases are not such of genuine syphilis.

PRUSSIA.

BERLIN, March 24.

DR. LIEBREICH ON RETINITIS PIGMENTOSA.

Dr. Liebreich, who has for many years been Assistant to Professor A. von Graefe, and is well known for having constructed the handiest and most convenient form of ophthalmoscope now in use in Germany, has recently given us the result of his observations on retinitis pigmentosa, which have brought to light many curious facts that have hitherto escaped the attention of oculists.

Retinitis pigmentosa is a disease which in children is first perceived by their seeing unproportionately ill in twilight, and if the light is weak, the field of vision is limited. This limitation slowly increases with age, and generally leads to complete blindness after the thirtieth or fortieth year, the patients not having been able to guide themselves for many years previously; but, until they become quite blind, they could read very fine print in that part of the field which was still open to them. In such cases the ophthalmoscope shows extensive changes of the choroidea and the optic nerve, fine exudations into the retina, which, with increasing age, becomes more and more atrophied, and a very peculiar formation of pigment; at some distance from the optic nerve there are intensely black-pointed or star-shaped spots, which in some cases form a thick net-work, and in others are only dispersed here and there. About a year ago, Dr. Liebreich observed in a patient affected with this disease, that the parents were cousins, and his attention being attracted to this circumstance, he found on inquiry, that the same was the case in one half of the patients who have since then come under his care. Descent from marriages of consanguinity is often mentioned as the cause of insanity, cretinism, deafness and dumbness, malformations, albinism, etc. Dr. Liebreich therefore endeavoured to discover whether retinitis pigmentosa was simultaneous with any of these diseases, especially cretinism, idiotism, and deafness and dumbness.

In speaking of the vision of cretins, M. Maffei remarks, that they do not seem to perceive small objects, when held closely to the eye, although this organ may be quite healthy, and that this is probably to be ascribed to their great apathy and indifference, and also to their not being accustomed to occupy the eye with small objects. But Dr. Liebreich holds

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that this peculiarity of the cretins is due to the limitation of the field of vision in them, which forms the most peculiar symptoms of retinitis pigmentosa. In fifty idiots examined by this gentleman, he found three suffering from the disease just named, and amongst these the descent of only one could be ascertained. His parents, who were cousins, were of noble family, in which marriages between near relatives had occurred for several generations. The grandfather of the idiot just mentioned was married to a stranger, and had three healthy children. Of these, the eldest son was also married to a stranger, while the two daughters, one after the other, married the same cousin. The eldest son has had eleven healthy children, of whom nine are alive, and part of them married, and have also begotten healthy children. Only one of these married a cousin, and he has one idiotic child and six healthy ones. Of the two daughters just mentioned, the elder, who married her cousin, died while giving birth to her first child, which was still-born. Her husband then married the deceased wife's sister, and had by her thirteen children. Of these, two died in the first year, the third died some time later from dysenteria, a fourth, who was completely paralysed, lived to the age of sixteen; a fifth and sixth are quite blind; and, according to the description given, most probably in consequence of retinitis pigmentosa. The seventh, whom Dr. Liebreich has examined, is idiotic and affected with retinitis pigmentosa. The other six children were healthy: one of them is married to a stranger and has no children; another is married to a cousin, and has one idiot child among seven. A third, who married a cousin, has only one feeble child; the three other healthy ones are unmarried.

With regard to the deaf and dumb, Dr. Mackenzie has already observed that pigment spots in the retina have been found on a post-mortem examination of a deaf and dumb person. This has since been confirmed in live deaf and dumb persons by the ophthalmoscopic examination. There are at present 341 deaf and dumb persons in Berlin. Of these Dr. Liebreich has examined 241 with the ophthalmoscope, and has found 14 with retinitis pigmentosa—a large number, if the rare occurrence of this affection is taken into consideration. He thinks, that besides these 14 cases, there are not more than 20 others of retinitis pigmentosa to be found among the entire population of Berlin. Among the 14 deaf and dumb, who were affected with that disease, there were no less than 8 Jews, which is, perhaps, to be ascribed to the frequency of marriages of consanguinity among them. Of 341 deaf and dumb there were 42 Jews; this extraordinary proportion shows that one deaf and dumb person is to be found in 1477 Christians, and one in 368 Jews. If non-residents in Berlin are subtracted, the proportion between Catholics and Protestants is one in 2173 Protestants, and one in 3179 Catholics. This difference is easily explained by the fact, that the Roman Catholic religion forbids marriages among near relatives. Among the deaf and dumb affected with retinitis pigmentosa 5 were sisters and brothers, 4 were sisters and brothers, 2 were sister and brother, and 3 were children of different parents. The history of the family of the five who were sisters and brothers is curious. The father is a healthy soldier, but is given to hard drinking. He had by his first marriage two healthy children, and after the first wife's death he married the elder of two sisters, by whom he had six children, among which were three deaf and dumb. During this marriage he had by the younger sister of his wife a son, who was also deaf and dumb. All the children who were deaf and dumb, also suffered from retinitis pigmentosa; and Dr. Liebreich has always found that, if deafness and dumbness and retinitis pigmentosa are prevalent in a family, the children who suffer from one are also affected with the other; and that those who are free from the one do not get the other. In the eldest of the children mentioned the disease has made such progress that he cannot guide himself, and he can no longer understand language by signs, so that his fate is really terrible, as he is almost entirely excluded from communication with others. Of 35 cases examined by Dr. Liebreich 14 were the offspring of marriage of consanguinity; twelve were not so, and in nine he could not discover the circumstance.

Since Dr. Liebreich drew attention to these peculiar facts connected with retinitis pigmentosa, Professor A. von Graefe has observed in 25 cases of this disorder eleven times descent from marriages of consanguinity. Of A. von Graefe's 25 and Dr. Liebreich's 35 cases five are identical, so that up to the present time 23 out of 55 cases are known, in which the consanguinity has been proved. Dr. Liebreich purposes to extend his inquiries on this subject to all deaf and dumb persons in Prussia.

PROFESSOR LANGENBECK ON WATER-TIGHT BANDAGES.

In comminutive fractures of the extremities with wounds of the parts surrounding the bone, the want of a convenient bandage is very often sadly felt, as even that made with gypsum, or with starch and gutta percha, is easily soaked with pus, and the limb cannot have the benefit of the warm water bath, as without a contentive bandage a thorough extension is impossible. The same is the case after resections of the extremities, where, whatever bandage may have been used, it always requires to be changed several times, whereby violent pain is caused to the patient and the success of the operation endangered. Professor Langenbeck, therefore, asked Dr. Mitscherlich to see whether he could not construct a bandage, which was quite firm and at the same time allowed immersion in warm water. Dr. Mitscherlich has now ascertained that, if the gypsum bandage is soaked with an alcoholic solution of shellac, it quite answers this purpose. Professor Langenbeck has made use of such in a case, in which he recently performed resection of the elbow-joint. The gypsum bandage was made in the usual manner, the arm flexed in a right angle; little gypsum was applied at the back, and a very large quantity at the front. On the day on which the resection had been performed a large hole was cut into that part of the bandage which corresponded to the place of operation. Immediately after the bandage had been put on, ice in bladders was applied for relieving the pain. The following day a solution of one to two ounces of shellac in one pound of alcohol was spread over it with a brush in order to soak the bandage, which was afterwards covered by a more concentrated solution of shellac. By this proceeding the gypsum bandage had become so firm, that it completely resisted the action of warm water (from 88° to 93° F.), and its immobility was not at all impaired by it.

ON THE APPLICATION OF IRON WIRE FOR STOPPING HÆMORRHAGE FROM OPERATIONS.

Every Surgeon learns by sad experience that the silk threads which have until recently been exclusively used for the ligatures of blood-vessels, may infect the wound by receiving its secretion, which is in a state of decomposition. To obviate this inconvenience, and as an improvement on the silken ligatures, which also act as foreign bodies, Professor Simpson, of Edinburgh, in 1859 recommended acupressure. Although this method has, in a number of cases, yielded favourable results, Professor Langenbeck does not think that it will be generally received into Surgical practice, partly because the pressure by needles cannot be applied in all operations, partly because it seems to be dangerous in amputations (where the ligature of a large number of arteries may be necessary) to lard, as it were, the stump by so many needles. Professor Langenbeck has found the iron wires, which he has for the last eighteen months almost exclusively employed for ordinary sutures, also most successful for ligatures of arteries. In a case of amputation of the lower third of the leg, where the ligature was difficult on account of the infiltration of the parts, and six spirting arteries had been tied with iron wires, and the edges of the skin had been accurately united by iron sutures, the whole wound healed in the warm water bath by the first intention. The iron wires, which hung out of the edges of the wound, came away between the eleventh and sixteenth day. In another case, in which amputation of the thigh, just below the trochanter major, was performed (by flap), the superficial and deep femoral arteries were tied by iron wires, and the edges of the skin united by iron sutures. In this case the latter healed by first intention; the iron wires used for ligature came away between the fourteenth and twentieth day; and up to that time there had been healthy suppuration.

LIVERPOOL.

April 2.

During the last three weeks we have had in Liverpool one of those alarms of fever which, though not without cause, has given rise to wonderfully exaggerated apprehensions. The facts I will give you as briefly as possible.

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On the 22nd of last February an Egyptian war steamer, the *Sebaab Gebald*, arrived here from Alexandria. She had had a long voyage; her crew, about 300 in number, had been poorly fed and worse clothed; about 80 were on the sick list at the time of her arrival, while among both sick and healthy one of the nastiest of the plagues of Egypt existed in the most rampant development. She was placed in the London Dock, where, within a week, six of her crew died of dysentery, but there was no fever on board. On February 26 and 27, 32 men, principally Arabs, some Abyssinians, were transferred to the Southern Hospital. They were mostly cases of dysentery or bad diarrhœa, a few of chest affections, and three or four of frostbite. The condition of the men on their admission exceeded in filth and stench anything that had ever come under the eyes and noses of anyone in the Hospital, from the Physician to the porters inclusive, and the—"not to put too fine a point upon it"—lice upon them constituted a phenomenon such as, I hope, has not been witnessed since the age of the Pharaohs.

There was at this time no fever in the Southern Hospital, but not long after the Senior House-Surgeon was attacked with typhus. The Junior, who was absent on account of ill-health, most unfortunately came repeatedly to see his colleague, and he soon sickened also with typhus. A clergyman who visited the Hospital was similarly attacked; a Student from the Medical School who acted as House-Surgeon, two nurses, two porters, and nine patients.

At the same time that the sick were removed from the frigate it was thought desirable to wash the healthy; and between February 26 and March 1 more than two hundred of the crew were taken to the Paul-street baths and wash-houses. Here, again, their horrible state of dirt and vermin excited no little notice, and here again typhus followed in their train. On March 2 a bath-man was attacked, and the next week the keeper of the baths and a female attendant.

A little later a chemist's assistant, who had been some hours on board the frigate, was taken ill, and he is still suffering from typhus. On March 14, the pilot who brought the vessel into port died of "bronchitis and fever." Meantime, while the victims of the portable malaria which these unfortunate sailors carried whithersoever they went were struggling through the early stages of typhus, most of the men themselves were getting better. Three of them died of dysentery, one within a few hours of his arrival; twenty-four were discharged cured between the 8th and 23rd of March; and the remainder, one case of pneumonia and four Surgical cases, are doing well. Seventeen of the original thirty-two left with the others of the same crew for Alexandria on March 15, and the vessel herself has been taken over to Birkenhead, and, I believe, sunk for a time in one of the graving docks. The Hospital has been emptied of every patient who could possibly be moved, and is to be closed for a month. Up to the present time there have been twenty-four clear cases of fever, the origin of which is traceable to this Egyptian crew. Of the twenty-four, five cases have proved fatal—those of the pilot, the bath-man at Paul-street, a clergyman, a student from the Royal Infirmary School of Medicine, and one of the nurses of the Southern Hospital. The infection seems to have been received in two instances on board the ship; in three at the Paul-street baths, and in nineteen at the Southern Hospital. With regard to the type of fever, I can say nothing certain as to the cases of the pilot and those which occurred at Paul-street. In the others the symptoms were those of typhus, varying, as might be expected, in intensity, and in the relative prominence of various phenomena. The clergyman, to whom I referred as one of the first victims, was, I believe, about 27 years of age, most earnest and energetic in his work, but by no means robust; engaged as a master in the Collegiate Institution, as a curate at Grassendale Church, and spending much of what little leisure remained to him in visiting the sick. After being at the Southern Hospital he felt not quite well, but thought little of it. On Wednesday, March 13, he conducted an evening service at Edge Hill church, after which he called on his Medical man, who at once ordered him off to bed. For the first few days the pulse kept about 104, and the tongue moist, the principal symptom being "splitting headache." Typhus eruption came out at the usual period; the head symptoms did not occur till late in the progress of the disease, and the tongue remained moist and white until within the last 48 hours. There was some epistaxis, but no abdominal complication. He died on the 22nd, this being about the tenth day of the fever. The case of Mr. Dooley, the Student who supplied the place of one of the House-Surgeons, was still more rapid in its course. On Sunday, March 17, he complained of what he thought "muscular pains" in his back, and returned home the next day. There was then some tendency to stupor; the pulse was about 120, and continued about that rate till Wednesday, when the eruption made its appearance. Then he seemed to improve; there was copious perspiration; and on Friday the pulse had come down to 100. On Saturday morning there was violent epistaxis, and some delirium during the night following, the pulse rising again to 120; the tongue was moist and white almost throughout his illness. On Sunday there was a good deal of vomiting of almost black, flocculent matter. On Monday, the 25th, the ninth day of the fever, great prostration occurred; the vomiting became worse and worse, and the pulse more feeble, and about half-past seven he died. It was stated in one of the local papers that this young man had been in ill-health for some time. This was not the case: he had an attack of peritonitis last August, from which he recovered rapidly, and remained well until his fatal illness. The case of the nurse who died was somewhat similar to the last; there was the same copious diaphoresis; the same apparent improvement after the appearance of the rash; and the same rapidly fatal prostration at last. She died on the twelfth day of the disease. In some of the cases which have recovered, or are still under treatment, there has been diarrhœa, but not the specific characteristics of typhoid fever.

At this date I do not feel assured that we know the whole extent of the mischief, though I hope we have seen the worst of it. There may have been other cases happening similar to one which occurred at the workhouse. A surgical patient sent up from the Southern Hospital, apparently quite well, who, on Saturday last, presented all the premonitary symptoms of fever, and without having been exposed to any known cause of infection, excepting that which he seemed to have escaped in the Southern Hospital. There is, I think, no mystery hanging over the cause of this inroad of fever. An experiment as to what would be the effect on the inmates of an Institution of a short series of visits from a large number of dirty, noisome, but otherwise healthy individuals, was tried at Paul-street. Another experiment, as to the effects of a long visit from a smaller number of equally dirty and noisome individuals, who were also sick, was tried at the Southern Hospital, and with the results I have mentioned. But, it may be asked, was there no other cause, traceable in the state of health of the town, to account for so many near two or three fatal centres being stricken down, almost as if some invisible shells had dropped and burst their scattering poison all around them? None that can be ascertained, for the deaths from typhus were below the average. Dr. Duncan, the Officer of Health for the borough, stated in a report (to which I am indebted for some of the foregoing facts) to the Health Committee on Thursday last, that, "in the last three weeks, the deaths, inclusive of those which may be traced to the Egyptian sailors, were 29; while, in the same period of the preceding three years, the average was 32."

Is the cause, then, traceable in the Hospital itself? No; for there was none there before the sailors were admitted, and there never had been an outbreak of fever there before.

Here, perhaps, I should say something as to the Hospital itself. It was built in 1841, near the southern end of the docks; the ground on which it stands is low, and rises but very gradually from the level of the Queen's Dock. Accommodation is provided for 100 patients, and the highest number of patients, even when the 32 sailors were all there, was 96. It is built as a parallelogram, the wards opening into a central space, which extends from the basement to the roof, and is closed above by a large skylight, parts of which are moveable, so as to afford free communication with the outer air. The ventilation is on the plan adopted, I believe, in most modern prisons. There is a large central shaft, with which flues from each ward communicate; in this a draught is maintained by means of a fire. Whether this be the best mode of ventilation or not I do not stop now to inquire; but there is no doubt that, with it, all has gone well up to the last month. As to cleanliness, the state of the Hospital leaves nothing to be desired. On three sides there is a considerable vacant space around the building, so that want of air can

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hardly be alleged as the source of the evil that has happened. But, if any proof be needed that the power to create typhus is one of the inalienable prerogatives of Dirt, the cases I have cited surely support the assumption of that power, and favour the supposition that, on every possible opportunity, and in every possible place, this fell prerogative will unquestionably be exercised.

GENERAL CORRESPONDENCE.

NEPHALISM.

LETTER FROM DR. LEES.

[To the Editor of the Medical Times and Gazette.]

SIR,—My attention has just been called to a leader in your Journal of February 9, on the subject of Biblical Criticism and Teetotalism, in which you do me the honour of noticing my volume, but (unwittingly, I am sure) most grievously misconceived my views and my position. Professing to be a "truth-seeker," as you do, I may confidently expect that you will do me the justice to permit me to correct several mis-statements. I confine myself in this letter to mere correction; but if you are willing to admit my defence, I think I could show you that, on the admitted principles of Hermeneutics, as laid down by such scholars as Professors Donaldson, Davidson, and Jowett, my *real* conclusions can be maintained to the very letter, and your objections entirely obviated.

You are pleased to attribute to me two specimens of "argument charming for its rotundity," in which a foregone moral conclusion is made the premiss for a verbal and critical inference! What I beg to say is, that I have not only searched in vain for the authority in my works for this statement, which surprised me more than it possibly could your readers, but I have met everywhere plain repudiations of such a process as illicit, illogical, and uncritical. In Vol. ii. of my "Works," in the very introduction to the Bible Inquiry, it is laid down as a fundamental principle that the object of the search is what the Book *says*, independent of its inspiration or religious character. As to my definitions of wine and other general words, I arrive at them solely by a process of historical inquiry and textual induction, altogether discarding assumptions and glosses of a dogmatic nature. In conclusion, I have only to observe that a reference to my Exposition of the Marriage at Cana (Vol. iii. p. 26) will show you that my principles are exactly those most utterly opposed to Manicheism—nay, distinctly reclaims Teetotalism from any Manichean taint.

I am, &c.

F. R. LEES.

Kent House, near Leeds, March 30.

We trust that not a word has proceeded from our pen which can be considered disrespectful to Dr. F. R. Lees, for whose learning and energy we have the greatest respect, and whose name we introduced in order to show the source from which Professor Miller had borrowed all that was not absurd in his exceedingly weak and Manichean work entitled "Nephalism." But in order to justify the assertion that Teetotallers, following Dr. F. R. Lees, (doubtless, unconsciously) "make a foregone *moral conclusion* the premiss for a verbal and critical inference," let us recall to him and to our readers the passage from Proverbs xxxi. 6, 7, on which we founded our charge:—

> "It is not for kings, O Lemuel, it is not for kings to drink *wine*,
> Nor for princes, *strong drink* (*sicera*, or *sheckar*),
> Lest they drink and forget the law,
> And pervert the judgment of the afflicted.
> Give *strong drink* unto him that is ready to perish,
> And *wine* unto those that be of heavy hearts,
> Let him drink and forget his poverty,
> And remember his misery no more."

Now, there can be no doubt of what the Book *says* in this passage; kings must not drink lest they forget the law; the miserable may drink that he may forget his sorrow. The structure of the parallelism is inexorable. If the miserable may not drink wine, or *sicera*, the injunction to princes to abstain is nonsense. Now, let us see from Dr. Lees' own words how he gets rid of a plain verbal and critical result because it is incompatible with his foregone moral conclusions; how he adopts a dogmatic gloss to escape textual induction; and how he will rather fly to any one of three non-natural and incompatible interpretations than accept the one plain, literal sense of a plain passage. We quote from Dr. F. R. Lees' article WINE, in Kitto's "Cyclopædia of Biblical Literature." (Edinburgh: 1847.)

"That *sheckar* was made inebriating by being mingled with potent drugs we have just seen; but it may be asked how shall we explain Proverbs xxxi. 6, 7, 'Give *sheckar* unto him that is ready to perish'? The Rabbins have generally referred this apparent command to the stupefying cup administered to criminals with the merciful intent of allaying their pains and fears." But can we associate so barbarous a custom with Divine inspiration? The example of the Redeemer is at least opposed to such a notion; and the spirit of Christ was the spirit of prophecy also, *and they ought therefore to harmonise*. Nevertheless, when "they gave Him to drink, wine mingled with myrrh, He received it not." Besides, this supposition does not account for the language of the seventh verse. The writer of a series of elaborate articles on the "Wines of Scripture," in an English periodical, contends that the advice is given *ironically*. Lemuel's mother warns her royal son against the deceitful influence of inebriating beverages, and represents them as being especially injurious in their operation on the personal and official character of kings; and then in a strain of evident irony, points to the wretch who vainly dreams the Lethean draught will rid him of the burden of anxiety and sorrow, which his own profligacy and intemperance have imposed. (*Truth-Seeker*, 1845-6.) A third view of this *difficult* passage is given in the article "Strong Drink," where *sheckar* is made to signify a concentrated syrup having restorative virtues.

We venture to add that the passage is not difficult to anyone who is not a Teetotaller, though it is more than difficult, it is insuperable, to those who are; and having, we trust, vindicated the mention we made of our courteous and learned correspondent, we think that the controversy had better cease.

THE LATE INQUEST AT NORTHAMPTON.

LETTER FROM DR. WEBSTER.

[To the Editor of the Medical Times and Gazette.]

SIR,—In your last publication allusion is made to an inquest, with the post-mortem details of an "extraordinary" case of paraplegia admitted to the Northampton Infirmary on the 27th ult.

The subject thereof was admitted under my care, and the patient's own statements, with the history sent with him, were so irreconcilable with the symptoms, that at the first examination the gravest suspicions were awakened.

The particulars obtained from the patient and his Medical attendant, Mr. Dufty, of Stony Stratford, are shortly as follows:—

J. M., aged 36, a moulder, from Wolverton, states that he was in perfect health on Friday, February 15; had followed his usual occupation on that day; had met with no accident or injury then or before; never experienced any pain, weakness, twitchings or numbness in spine or legs, or any trouble with his water or bowels; had ever enjoyed good health and strength. After receiving his wages on that day had gone out and met some friends, got very drunk, presumed he tumbled in the street, and slept some time on a very cold night, was picked up in a palsied condition; but was too tipsy to know or recollect anything about it.

Mr. Dufty, who saw him very shortly afterwards, found him paraplegic with total deprivation of sensation and power of motion in the lower extremities, and with a distended bladder. Catheterism drew off a quantity of clear urine, and was followed by nearly a pint of clear blood; and for several subsequent days the urine was sanguineous and subsequently

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purulent. Appropriate treatment was administered and no amelioration following, the patient was sent to the Infirmary on February 27.

February 28.—Patient collected, sensible and rational; no bruises or discolorations upon his body; recent vesications from vigorous counter-irritation of the lower extremities; respiration languid, pectoral, and abdominal; no pain or loss of sensation or motion in upper half of body; total loss of both in half below umbilicus; inability to pass his water or restrain his motions; acute pain from abdominal pressure over hypogastrium; examination of the spine discloses a decided projection of the tenth dorsal vertebra, with manifest tenderness over its right arch and only obscurely tender over its left arch.

The patient goes from bad to worse; urine becomes fetid; abdomen tumid, vomiting and collapse set up, and he dies on the fourth day of admission, and the eighteenth day of illness.

The post mortem examination, most carefully performed by Mr. J. F. Gray, our House-Surgeon, reveals peritonitis with considerable effusion, a gangrenous bladder, with a rupture therein, not I think occasioned by a catheter passed at the autopsy. The right arch of the tenth dorsal vertebra was fractured: a clot of blood, about a drachm, pressed upon the cord, whose continuity was not destroyed or its substance injected.

At the adjourned inquest, evidence was given that the deceased had, on the afternoon of February 15, tumbled over some iron, hurting his back, so as to render some friendly help necessary in lifting something. When quite conscious he oft asseverated to me that he had met with no hurt or injury on that day or ever before. Had he met with such an accident producing the spinal fracture, freedom from pain, ability to transact business, desires for amusement and indulgence, locomotion, and power over his bladder and sphincter during several consecutive hours, is to my mind a pathological impossibility.

Moreover the condition of the bladder and the peritonitis are not explicable by such an alleged and uncomplicated injury to the spine; especially as careful catheterism was quickly performed before any dangerous distension of the bladder could have given rise to mortification and consequent peritonitis. I cannot either conceive of a drunken man falling in the street, and inflicting such an injury to his spine and at the same time rupture his bladder, without immediate peritonitis, fatal in three days, supervening.

From these, and some other reasons, I feel convinced that the circumstances which led to this patient's injuries and consequent death have not been elicited, though most carefully and patiently investigated, by the Coroner.

I am, &c.

John Henry Webster, M.D.,
Physician to the Northampton Infirmary.

Northampton, March 26, 1861.

DIPHTHERIA AND SCARLET FEVER.

Letter from Dr. Monckton.

[To the Editor of the Medical Times and Gazette.]

Sir,—Nearly two years ago, you favoured me by inserting some communications on the subject of Diphtheria. One point of interest then, as now, was the connexion of this disease with scarlet fever. I ventured to pronounce at that time the opinion that while the kinship between them was not possible to be overlooked, there was no such identity as to entitle them to be considered as merely modified manifestations of the same thing.

Two cases recently occurring in my practice appear to confirm such a view. One was that of A.T., a miller's son, four years old, who, living in the midst of prevailing scarlet fever, but without diphtheria in the neighbourhood, was seized on the 17th of January, 1861, with the clearest symptoms of the former malady. The inflamed throat, papillated tongue, and scarlatinal eruption, were boldly prominent for at least a week, accompanied after the second or third day by fibrinous patches on the tonsils. The latter appearance though watched with interest, we at first thought might be the ordinary exudation of an inflamed mucous membrane. About the middle of the second week, however, the false membrane spread to posterior nares and pharynx, and on the twelfth day the skin had begun to desquamate, the membrane to occupy the larynx and trachea, the child exhibiting at this stage a beautiful example of diphtheric croup. Hence the false membrane travelled slowly into the bronchi, the glottis becoming to a certain extent free; *i. e.* the dyspnœa had become thoracic instead of laryngeal in its nature.

In this way, partly from blood-damage and partly from impeded respiration, the little patient sank on the twenty-second day. The urine was analysed twice, and found albuminous on both occasions. In this case I saw for the first time, after studying some hundreds, the co-existence of two distinct sets of symptoms: the one, if it had occurred alone, capable of constituting a perfect case of scarlet fever; and the other, of equally well-developed diphtheria.

Herein lies the point,—not that a mixed or mongrel case, presenting some of the characters of either disorder, has been met with, but that diphtheria, in that form least assimilated to scarlet fever, viz. the croupal, has been presumably originated by the scarlatinal poison, and certainly co-existent with a scarlatinal attack. Hence the kinship of the two, now more generally recognised than it was two years ago, is very strongly demonstrated. The non-identity of these diseases seems to a certain extent established by a somewhat later piece of experience in the same parish.

A girl, E. B., aged 10 years, was the only one out of a family of eight who suffered a clear but moderately mild attack of diphtheria in February, 1860. The same child has been similarly singled out and undergone a similar attack in this February, 1861,—a circumstance which, though remotely possible, would have been in the highest degree improbable with scarlet fever.

I am, &c.

Stephen Monckton, M.D.

Brenchley, Kent, March 26, 1861.

EYE-DROP BOTTLE.

Letter from Mr. Wordsworth.

[To the Editor of the Medical Times and Gazette.]

Sir,—In a recent number of your valuable Journal appeared a description of a very convenient bottle for dropping small quantities of fluids,—a desideratum for microscopists and others.

May I ask for space to describe a dropping-bottle that has been made, at my suggestion, by Messrs. Weiss, of the Strand, and by Mr. Doublet, of Moorgate-street, City. It is intended for the instillation of solution of atropine in ophthalmic cases, but will answer many other purposes of the Surgeon.

It is simply, then, a small bottle (contained in a wood case for protection in the pocket), the stopper of which is prolonged so as to reach nearly to the bottom of the bottle, and tubular. Immediately below the limit where it is embraced by the neck of the bottle, a small aperture is placed so as to allow of the escape of air by displacement on dipping it into the bottle partly filled with fluid. On withdrawing the stopper, a few drops are taken up, and may be gradually discharged on the conjunctiva or elsewhere *ad libitum*. Its advantages may briefly be said to consist in its simplicity of construction, and consequent indisposition to derangement; and, lastly, it may be made by any ordinary glass-blower at a trifling cost.

I am, &c.

J. C. Wordsworth.

50, Queen Anne-street, Cavendish-square.
March, 1861.

Death of an American Physician from Communicated Disease of the Throat.—The *Boston Medical and Surgical Journal* gives an account of the death of Dr. Horace Adams, who attempted to resuscitate a patient suddenly dying of disease of the throat, by endeavouring to inflate the lungs by blowing into his mouth. On the second day Dr. Adams began to complain of pain in the throat, and rapidly grew worse; false membranes, which were formed in abundance, being expectorated with great difficulty. Death took place on the sixth day; and at the autopsy the false membranes were found covering the tonsils and fauces, extending through the glottis and trachea to the secondary bronchi.

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REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MARCH 26, 1861.

DR. BABINGTON, President, in the Chair.

A Paper, by Dr. LEE, was read, entitled

FURTHER OBSERVATIONS ON THE STRUCTURE AND TREATMENT OF UTERINE POLYPI.

The Author commenced his communication by stating that until a recent period the anatomical structure of the different varieties of uterine polypi was imperfectly understood, and they continue at the present time to be confounded by many writers with the malignant or cancerous diseases of the uterus. Fleshy tubercles or fibrous tumours of the uterus were first described by Dr. William Hunter, but it does not appear that he had observed any of those tumours which had passed through the os uteri and become polypi. The similarity of structure between fibrous tumours of the uterus and polypi was first pointed out by Dr. Baillie, and many writers have since inferred that all uterine polypi are fibrous tumours, or, as they are now termed by some, "fibroids" of the uterus. Cancerous fungous tumours of the os and cervix uteri have been described by Dr. Baillie as "another sort of polypus," though an entirely different disease. In a paper on "Fibro-Calcareous Tumours and Polypi of the Uterus," published in the nineteenth volume of the *Medico-Chirurgical Transactions*, the Author states that he described four or five varieties of tumour of the uterus, not cancerous, to which the term polypus had been applied. In a supplement to this Paper, published in 1850, he described the arteries and veins which ramify throughout the substance of these tumours. A series of preparations were placed upon the table of the Society to illustrate these varieties of polypi. The object of this communication is to state the results of all the cases of uterine polypi which have come under the Author's own care, and which he has seen under the care of other Practitioners. An abridged history of these cases, reduced into a tabular form, accompanied the Paper. In 3 of these 103 cases no operation was performed. In 2 of the remaining 100 cases the polypi disappeared spontaneously. Of the 98 cases which remained 5 died before any attempt had been made to remove the polypi by ligature or any other means. Of the 93 which remained 85 recovered and 8 died. By referring to the table, the Author observes, it will be seen that in the first of these fatal cases the patient was insensible and moribund when the ligature was applied by Mr. Perry at the St. Marylebone Infirmary. This is the first case adduced by a recent writer on the Diseases of Women to prove that of 20 cases recorded by the Author the mortality was usually greater than in lithotomy, placenta prævia, and malignant cholera. In 6 only of the fatal cases, after the application of the ligature, could the death be attributed to the operation. "By an examination of this table of 103 cases of uterine polypi," the author adds in conclusion, "it will be seen that of the last 56 cases which have come under my own care, and in which the operation for the removal of the polypi has been performed by me, not one patient has died. The various methods of treatment adopted in these cases, having been minutely described, do not require to be again detailed."

Dr. O'CONNOR wished to know if Dr. Lee had tried any other means for the removal of the polypi besides those mentioned in his paper. It had been stated that they were removeable by certain medicinal agents, and also that they would sometimes disappear spontaneously. He alluded to the treatment by gouging a piece out of the tumour, which had recently been done by Mr. Baker Brown. He had personally no experience in that mode of treatment. He had, however, found that under large doses (3ss. to 3j.) of the bromide of potassium, the tumour would often very rapidly diminish. It had been stated by Dr. Copland that biborate of soda was very useful in reducing the size of the tumour, but he had not seen any benefit from it.

The Author had tried all the reputed remedies, but had never in a single case been able to trace any benefit to their administration. He then alluded to the specimens on the table which were brought forward to illustrate his paper, pointing out the peculiarities of each. He considered that a previous paper of his had not been fairly treated. He then gave the history and a description of a certain number of specimens of uterine polypi, and these cases had been taken as giving the results of his treatment. They were, however, all that Dr. Lee could collect, to illustrate chiefly the pathology of the subject, and many of them had never been under his care at all, and several of the specimens were taken from persons whom he had never seen during life.

A Paper, by Mr. HENRY THOMPSON, was read, on

ELEPHANTIASIS ARABUM AFFECTING THE LEG; WITH AN ANATOMICAL EXAMINATION OF THE STRUCTURES MADE AFTER AMPUTATION.

A woman, aged forty-two years, had suffered from gradually-increasing enlargement of the right foot and leg, which commenced six years ago. Simple chronic ulceration had affected it for many years previously. She had never been in India, but her husband, a soldier, had been there five years, and returned invalided. They lived together eighteen months afterwards, when he died of acute pleurisy. Her family has not been healthy, although she, with the exception of the leg affected, has enjoyed excellent health. Of late the limb had greatly increased in size, and was subject to very frequent attacks of inflammation and violent pain, disabling her from following any occupation, and for the treatment of which she had been an inmate of the Marylebone Infirmary twenty-two times within two or three years. It was on this account she wished very earnestly that it might be removed, and she was admitted into University College Hospital, under Mr. Thompson's care, for that purpose The measurement round the heel and instep in the left leg was twelve inches; in the affected one, seventeen inches and a-half. This is a fair index to the comparative magnitudes throughout; but the difference ceased altogether just above midleg. The author amputated immediately beneath the knee, on January 9, 1861, and she left the Hospital, after progressing very favourably, in about five weeks. Dr. Harley, Professor of Histology at University College, made a careful anatomical and microscopical examination of the limb, the summary of numerous details being, that he found "the muscles and tendons, as well as the bones and cartilages, in no way implicated in the disease; even the subcutaneous areolar tissue appears to be perfectly normal. The disease, in the present case at least, is essentially a disease of the skin, and more especially of the true skin, or derma, the changes occurring in the epidermis being probably the result of disordered nutrition, and secondary to those occurring in the true skin."

Dr. THOMAS RICHARDSON referred to a discussion which followed a paper by him on the same subject. Dr. Webb, one of the speakers on that occasion, had drawn a very stringent line between those cases which were due to syphilis, and those which arose from endemic causes. He (Dr. Richardson) then thought that it was too hasty to refer any form of elephantiasis to syphilis; but after hearing Mr. Henry Thompson's case he felt quite convinced that such might often be its origin.

Dr. WEBSTER would ask if the female sex was more liable to the disease, and if the right leg was more often affected than the left? The disease was, he believed, very common in the North of Africa.

Dr. RICHARDSON remarked that in the patient whom he brought before the Society the left was the leg affected. In Barbadoes the idea of the disease being due to syphilis was repudiated. It was generally attributed to exposure to cold and wet.

Dr. O'CONNOR had seen several cases. Two were males; one was a female, who had been a prostitute, and had had syphilitic disease of other parts.

The Author said that when he removed the limb, the evidence that it was syphilitic was not very conclusive. Since, however, she had an eruption of a most unmistakeable character. The most interesting feature was that the disease in this patient, although she had never been abroad, seemed to have some connexion with India. Her husband had been in the West Indies and came home ill, and died some few months after. It might be supposed that from some peculiarity, syphilis contracted in India might have been so modified as to cause this peculiar form of disease.

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MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS (a).—The following gentlemen passed their Primary Examinations in Anatomy and Physiology on the 2nd inst., viz. :—

Averell, A., Westminster Hospital
Badcock, L. C., Charing-cross Hospital
Becker, J. L., King's College
Bingley, W. P., University College
Booth, L., Guy's Hospital
Bradley, S. M., Manchester
Brown, E. A., Charing-cross Hospital
Clarke, T., St. Thomas's Hospital
Cookson, A. N., Guy's Hospital
Davies, J., Birmingham
Eagles, W., Middlesex Hospital
Fletcher, W. B., St. Thomas's Hospital
Gaine, C., Bristol
Greene, J. A., Calcutta
Haden, E. C., Guy's Hospital
Holman, T., Guy's Hospital
Humphry, C. H., St. Bartholomew's Hospital
Joyce, T., Middlesex Hospital
Kidd, H. A., Calcutta
Lawrie, J. D., Leeds
Le Tall, W. J., Sheffield
M'Lean, H., Newcastle
Morgan, E., Middlesex Hospital
Morton, T. H., Sheffield
Rix, S. B., Middlesex Hospital
Rutherford, S., Middlesex Hospital
Saul, W., University College
Shillitoe, R., University College
Spanton, W. D., Middlesex Hospital
Swyer, S., London Hospital
Waugh, A., Bristol
Wilson, W. S., Westminster Hospital.

The following gentlemen passed their Primary Examinations in Anatomy and Physiology on the 3rd inst., viz. :—

Baker, T., Birmingham
Bell, H. R., King's College
Bott, J., Manchester
Bottle, A., University College
Bootiman, J. S., Newcastle
Bracey, W. A., Birmingham
Brown, F. G., St. Thomas's Hospital
Byrne, P., Manchester
Davies, L., Grosvenor-place
Done, J., St. Bartholomew's Hospital
Elias, D., Manchester
Elliot, R. L., St. Bartholomew's Hospital
Evans, E., University College
Fisher, L., Charing-cross Hospital
Fouracre, R. P., St. Thomas's Hospital
Griffin, W. H., University College
Hepple, T., Newcastle
Hubert, T. K., St. George's Hospital
Jones, J., St. Bartholomew's Hospital
Knight, W. H., Guy's Hospital
Lee, W. E., Middlesex Hospital
Lewis, D., University College
May, L. J., King's College
Moss, H., Manchester
Pilkington, T., St. Bartholomew's Hospital
Platt, R., Manchester
Rains, S., Manchester
Renshaw, J. W., Manchester
Roberts, W. R., Birmingham
Robinson, H., King's College
Rowland, J., University College
Serjeant, D. M., Guy's Hospital
Ure, J., Birmingham
Warrington, F. W., King's College
Whitlam, J., Manchester.

(a) This College is the only one which does not send lists of New Members to the Medical Journals.—Hence frequent mistakes, for which the Journals are not responsible.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise on Thursday, March 28 :—

Davey, Alexander George, Walmer, Kent
Dudley, Charles, Northwick, Davenham
Fowler, Charles Henry
Harper, Joseph, Great Torrington, North Devon
Hopkins, Alfred Boyd.

The following gentlemen also on the same day passed their First Examination :—

Barnes, Edward Charles, St. George's Hospital
Cookson, Samuel, Needham Market
Cookson, Albert Neafield, Needham Market
Welch, Charles Henry.

APPOINTMENT.

HAWARD.—Dr. Edward Haward has been elected Physician to the Westminster General Dispensary.

DEATHS.

ANDERSON.—Recently, Alexander Anderson, Surgeon, Royal Navy, on the retired list (seniority, 1790).

BEST.—March 19, Norris Best, of Bilston, Staffordshire (in practice prior to 1815), aged 80.

BLAGDEN.—March 31, at Bath, Richard Blagden, late of Albemarle-street, Piccadilly, F.R.C.S. Eng. (Hon.) and M.R.C.S., Surgeon-Accoucheur to the Queen, and Surgeon Extraordinary to her late Royal Highness the Duchess of Kent, aged 72.

BROADBENT.—March 22, at the Hollies, near Warrington, Lancashire, Wm. Henry Broadbent, late of Liverpool, M.D. Edin., M.R.C.S. Eng., aged 32.

DICKSON.—Recently, Walter Dickson, Surgeon, Royal Navy, on the retired list (seniority, 1807).

DOOLEY.—March 25, at Ranelagh-street, Liverpool, Wm. Dooley, Student of Medicine, aged 20. His fate was a very melancholy one: he was a young man of great promise, and bid fair to take a good position in his adopted Profession. He had already passed the Primary Examinations at the Royal College of Surgeons and Apothecaries' Hall with credit, and was pursuing his studies at the Royal Infirmary, Liverpool, where, in the discharge of his duty, he caught a malignant fever from the crew of the Egyptian frigate *Sebaab Gebald*, and died after a very short illness.

FORGET.—Recently, at Strasburg, M. Forget, the eminent writer and Physician.

GASQUET.—Recently, Joseph Gasquet, Surgeon, Royal Navy, on the retired list (seniority, 1806).

HARRISON.—December 4, Garland Foley Baylay Harrison, of Ker-street, Devonport, M.R.C.S. Eng., L.S.A., aged 52.

LAING.—March 23, at 13, Victoria-terrace, Exeter, William Christie Laing, late of the H.E.I.C.'s Medical Service and the Nizam's Cavalry, aged 61.

LANGSFORD.—December 8, George Johnston Langsford, of Hartshill, near Atherstone, Warwickshire, L.S.A., aged 38.

LARKEN.—February 19, at Bombay, E. L. M. Larken, M.D., Assistant-Surgeon H.M.'s Indian Army.

MARKHAM.—January 6, at Armidale, New England, Thomas John Markham, aged 44.

MORRIS.—March 25, Robert Rosebrook Morris, of Brixworth, Northamptonshire, M.R.C.S. Eng., L.S.A., aged 56.

NASH.—March 25, at Leatherhead, Surrey, William Llewellyn Nash, M.R.C.S. Eng., L.S.A., aged 50.

PACKARD.—March 21, at Yoxford, Suffolk, Mr. Francis Packard.

SHESTER.—March 1, of paralysis, after a protracted illness, at the Island of Montserrat, West Indies, Henry Sheester, M.R.C.S. Eng., formerly Public Medical Officer for the Island, aged 38.

STAUDIGL.—March 28, at the Lunatic Asylum, Vienna, Joseph Staudigl, the renowned bass-singer, aged 54. He was originally intended for the Medical Profession, and pursued his studies with that view for some time, but abandoned them for the profession in which he became so distinguished.

TATHAM.—March 28, Christopher Tatham, of Newby-place, Poplar, M.R.C.S. Eng. (in practice prior to 1815), aged 70.

WALLACE.—Recently, James Williamson Wallace, M.D. and L.R.C.S. Edin., Surgeon, Royal Navy, on the retired list (seniority, 1842).

WALLIS.—In December last, at Tien-tsin, China, Edward Wallis, Assistant-Surgeon, Fane's Horse.

WILDING.—March 25, Robert Wilding, of Blackburn, Lancashire, L.S.A., aged 60.

WILLIAMS.—March 24, at Blackheath, Thomas Troughear Williams, M.D. Edin., M.R.C.S. Eng., Count of the Lateran and Knight of the Golden Spur of Rome, Knight Grand Cross of the Sovereign Order of St. John of Jerusalem, aged 72.

THE NEW CORRESPONDING MEMBER OF THE ACADÉMIE DE MÉDECINE.—After a sharp contest, M. Leudet has been elected, by a majority of 10 voices of 75 voters, over his competitor M. Foussagrives. M. Régnault is to be the new member in the section of Physics and Chemistry.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—The following gentlemen will be balloted for, as Fellows of the above Society, on Tuesday evening, April 9 :—Robert Elliot, William C. Hoffmeister, and James Palfrey. The Ballot will be opened at half-past seven o'clock, and will close at half-past eight precisely.

PRIZE SUBJECTS OF THE ACADÉMIE DES SCIENCES.—1. *Montyon Prize of Experimental Physiology.*—The Academy will annually adjudge a gold medal of the value of 800 francs to the author of the work which, whether in MS. or in print, shall be considered to have most contributed to the progress of experimental physiology. The Essays or works to be sent in by the 1st of April of each year. 2. *The Montyon Legacy Prizes.*—One or more prizes will be adjudged to the authors of works or discoveries which shall be considered of the greatest utility in the art of healing, and to those who have discovered the means of rendering an art or occupation less insalubrious. As the object of these prizes is expressly new

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discoveries and inventions for the improvement of Medicine and Surgery, and diminishing the danger of arts and occupations, a well-defined discovery will alone entitle their authors to them. The exact sum that is to be awarded cannot be specified, as the number of prizes is not limited; but the testator's liberality has left ample funds to reward merit and recompense outlay. 3. *Prize in Medicine* for 1864, of 5000 francs, "The History of Pellagra." 4. *Prize in Medicine and Surgery*, for 1866, of 5000 francs, "The Application of Electricity to Therapeutics." The competitors will be expected to give an account of the electrical apparatus employed, their mode of application, and their physiological effects. They must also collect and critically examine the various facts which have been published on the application of electricity to the treatment of disease, and especially the treatment of affections of the nervous, muscular, vascular, and lymphatic systems. These are to be verified and completed by additional observations, and the cases specified in which it is desirable to have recourse to the continued and intermittent currents. 5. *The Great Prize in Surgery.*—Numerous physiological facts have proved that the periosteum possesses the faculty of producing bone; and some remarkable Surgical cases have shown that very extensive portions of bone may be reproduced by means of periosteum which has been preserved. The time seems arrived for calling attention to a new and important study; and the Academy proposes the subject—"The Preservation of Limbs by the Preservation of the Periosteum." The Academy allots the sum of 10,000 francs as a mark of the importance it attaches to this subject, and the Emperor having doubled the prize, it now stands at 20,000 francs (£800.) 6. *The Alhumbert Prize in the Natural Sciences*, for 1862.—A gold medal of the value of 2500 francs. "Endeavour by means of well contrived Experiments to throw new light on the question of Spontaneous Generation." The candidates are required especially to examine into the action of temperature and other physical agents, upon the vitality and development of the germs of the lower animals and plants. Any work, manuscript or printed, may be presented, prior to October 1, 1862. 7. *The Bréant Legacy* of 100,000 francs, for the discovery of a cure for the cause of cholera. Awaiting this fortunate event, the interest of the prize (4000 francs) is to be given to whoever advances science in relation to cholera, or other epidemics, or to the discoverer of the cause or means of curing "dartres." 8. *The Barbier Prize* of 2000 francs, for 1862, will be awarded to the best work deposited at the Academy on Medical Chemistry or Medical Botany.

PRIZES OF THE ACADÉMIE DES SCIENCES FOR 1860.—1. *Prize for Experimental Physiology.*—A great number of memoirs on various subjects have been sent in; but the Commission of the Academy confines its approbation to three, all relating to the nervous system. It has decreed its prize to Professor Stilling, of Cassell, for his great work on the "Structure of the Spinal Marrow." To MM. Philipeaux and Vulpian a first honourable mention is accorded for their "Experimental Researches on the Regeneration of Nerves separated from the Nervous Centres;" and a second mention is made of M Faivre's essay on "The Modification which the Properties of Nerves and Muscles of Frogs undergo after Death." 2. For the *Prize in Medicine and Surgery* the Commission decrees three prizes and three honourable mentions. A prize of 2500 francs to M. Davaine for his treatise on Entozoa; a prize of 2000 francs to M. Bergeron for his essay on "Ulcerative Stomatitis of Soldiers;" and one to M. Maingault of 2000 francs for his work on "Diphtheritic Paralysis." The honourable mentions, together with 1200 francs, are accorded to MM. Turck and Czermack for their works on the Laryngoscope; and to M. Marey for his "Studies on the Pulse."

QUEEN'S COLLEGE, BIRMINGHAM.—A special meeting of the Council was held on Tuesday last, when the election by the Governors of the Queen's Hospital, of Mr. Benjamin Hunt, as Ophthalmic Surgeon, and Mr. Samuel Adams Parker, as Dental Surgeon, was unanimously confirmed. Dr. Divers, of Queen's College, Galway, Fellow of the Chemical Society of London, and Corresponding Member of the Dublin Natural History Society, was unanimously elected Professor of Materia Medica. Dr. Divers has acted for more than seven years as Chemical Assistant in the Medical College of St. Bartholomew's Hospital, London; and in the Queen's College, Galway.

DEATH OF M. FERRUS.—Another of the French notabilities has passed away, in the person of M. Ferrus. He suffered a stroke of apoplexy some months ago, and has recently succumbed to its consequences at the age of 76. Entering life as an Army-Surgeon, he at an early period received marks of distinction from the hand of the Emperor, and went through the horrors of the Russian campaign, during which he suffered somewhat from congelation of the feet. At a later period, devoting himself to the study of mental alienation and the penitentiary system, he rendered considerable services to both science and the administration. A pupil, together with Esquirol, of the celebrated Pinel, he had the pleasure of introducing many of the ameliorations in the treatment of the insane projected by that philanthropical reformer. M. Ferrus first introduced bodily labour, especially agricultural, among the insane of France—the farm of St. Anne founded by him being the origin of all such establishments. It was, however, as Inspector-General of Asylums that he conferred so much benefit upon Mental Medicine. He also laboured greatly at the classification of prisoners, with the view of eliminating those who were more fitted to be the inhabitants of asylums. He was likewise a most earnest advocate for the establishment of institutions for the treatment of cretinism; and at his instance the Emperor has destined a sum of 200,000 francs for the erection of an asylum for these unfortunate beings at Chambéry.

COMPOUND FRACTURE OF THE CLAVICLE.—Dr. Little states that among 191 cases of fracture of the clavicle registered in New York Hospital in ten years, only two were compound. In one of these the man was crushed between two piles of lumber, and, among other injuries which soon caused his death, a compound fracture of the outer third of the clavicle was produced. The other man, a sailor, fell down a hatchway, and sustained a compound oblique fracture of the outer third of the bone, the outer end of the inner fragment protruding, and the hæmorrhage being slight. Suppuration followed, but when the patient left the Hospital, two months after the accident, the wound was filling up with healthy granulations, and union of the fragments had commenced.—*American Medical Times*, No. xi.

VITAL STATISTICS OF LONDON.

Week ending Saturday, March 30, 1861.

BIRTHS.

Births of Boys, 1031; Girls, 943; Total, 1974.
Average of 10 corresponding weeks, 1851–60, 1881·2.

DEATHS.

	Males.	Females.	Total
Deaths during the week	618	618	1236
Average of the ten years 1851–60	742·3	694·0	1436
Average corrected to increased population..	..	..	1580
Deaths of people above 90	..	..	.
Deaths in 15 General Hospitals	38	16	54

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1851.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	376,427	..	6	7	1	15	3	1
North ..	490,396	4	17	4	2	26	5	2
Central ..	393,256	..	4	..	3	11	1	2
East	485,522	..	3	4	2	21	6	3
South ..	616,635	1	..	7	..	31	9	3
Total.. ..	2,362,236	5	30	22	8	104	24	11

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·326 in.
Mean temperature	44·2
Highest point of thermometer	61·8
Lowest point of thermometer	36·5
Mean dew-point temperature	44·9
General direction of wind	S.W
Whole amount of rain in the week	0·56 in.

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Medical Times and Gazette.

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NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

B. W. should put the question, by letter, to the Registrar of the College.

The letter [of a "*Health Officer*" on "Our Hospital System" shall appear next week.

Dr. Anderson's eighth paper has been received.

Dr. Lemon's letter on the Treatment of Carbuncle shall appear next week if possible.

We regret that we cannot find room for the paper of Dr. Pons, of Montpellier, on Fever.

Dr. Cotton's paper on the Action of Liquor Potassæ in Phthisis shall appear next week.

Mr. Irvine, Liverpool.—Many thanks. Our Liverpool Correspondent, as Mr. Irvine will see, has sent a very full report of the circumstance.

A Second Assistant-Surgeon may see in some of our recent numbers that we endeavoured to prevent the intended mischief. Mr. Baring's impertinence in the House of Commons can only be excused by his evident ignorance of the duties of the Second Assistant-Surgeons.

Cantab. wishes to know whether the return to the "Medical Directory" of M.D. Lond., after the name H. J. Hinxman, Lee, Blackheath, is correct. Cantab. states that the M.D. Lond. does not appear in last year's "Directory," nor in this year's "University Calendar." Possibly the degree was obtained after the "Calendar" had been issued and before the "Directory" was printed.

Mr. S.—The following are the equivalents of the French and English measures:—

Millimètre	inch	·03937
Centimètre	,,	·39370
Decimètre	,,	3·93708
Mètre..	,,	39·37079

Dr. Reith's paper on Revivals appears more suited to the *Journal of Mental Science*, or to one of the Religious Reviews, than to these pages. Dr. Reith should understand that we do not necessarily agree with all that our German Correspondents may write. Our readers must take the letters for what they are—namely, Letters from eminent German Physicians and Surgeons, narrating facts, and expressing their own opinions, not ours.

Diet Tables.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Your querist "Scalpel" will find Diet Tables for the Army, Navy, and Poor-Law Unions, in Dr. W. H. Robertson's "Treatise on Diet and Regimen," Vol. I.; and a Scale of Diet for Prisons in Ireland in the *Times* of March 29, 1861.

I am, &c.

J. S.

Baillie.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—If Mr. Jeaffreson, before he copied from Dr. Forbes Winslow, had looked into Wadd's "Mems., Maxims, and Memoirs," a book which would have furnished him with a good many curious anecdotes "about Doctors"—he might have read the following, and thus have avoided the ridiculous blunder pointed out by Mr. Baillie in your last number.

"Baillie, not *Matthew Baillie*, but an *Irish* gentleman who had been rejected by the College, called the next day on Dr. Barrowby, who was one of the Censors, and insisted upon his fighting him. Barrowby, who was a little, puny man, declined it. 'I am only the third Censor,' said he, 'in point of age; you must first call out your own countryman, Sir Hans Sloane, our President, and when you have fought him and the two senior Censors, then I shall be ready to meet you.'"

April 1. I am, &c. J. D.

Physical Effects of Revivals.

Staff-Surgeon Hunter, writing from Moffatt, Dumfriesshire, says he has seen two cases, one of catalepsy, the other of hysteria, unaccompanied with convulsions.

"The first, an hour previously, had been taken out of a 'Revival meeting,' but neither then nor afterwards was it ascribed to anything else than the crowded and close church. We tried such stimulants as were at hand to the nostrils at first, but seeing the pulse was unaffected, and that she was sensible when spoken to, pointing to the epigastric region only, though otherwise exactly resembling syncope. We left with recommendation to watch her for an hour or so, or till she recovered sufficiently to be removed. We heard she was conveyed home an hour and a-half afterwards, and that she had been well since.

"The second did not occur till the morning after being at a 'Revival meeting.' She was discovered from her screaming in an outhouse with her head among the hay. 'Her sins' where her theme. I saw this, a strong country servant-girl subsequently to the meeting the evening before, and observed no indications whatever of distress of mind. She was put to bed, and continued in a distressed state two days, visited two or three times by the minister of the parish, a man of great scientific attainments, when she arose and went directly to a prayer-meeting, where she has been a frequent attender since, without any return of her emotional symptoms."

COMMUNICATIONS have been received from:—

Dr. West; Dr. Symonds; Dr. Risdon Bennett; Mr. Sands Cox; Mr. Irvine; Mr. Hornidge; Dr. Wilde, Dublin; Mr. Wilson; Mr. Holmes; Mr. Cooper; Registrar-General; Dr. McWilliam; Dr. W. Ogle; Mr. Raymond; Dr. Gibbon; Mr. Davies; Dr. Anderson; Mr. Cross; Mr. Butler; Mr. Cooper; Mr. Hammond; Mr. Hamilton; Mr. Murray; Mr. Copney; Mr. Vincent; Mr. Maxwell; Dr. Baines; and Our Correspondents at Liverpool, Paris, Dublin, Vienna, Breslau, and Berlin.

APPOINTMENTS FOR THE WEEK.

April 6. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

8. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

Royal Institution, 3 p.m. Professor Helmholtz "On Musical Acoustics."

Epidemiological Society, 8 p.m. J. N. Radcliffe, Esq. "On a Tract on Plague." Dr. Smart "On the Climate and Diseases of Hong Kong."

Royal College of Physicians, 8½ p.m. Dr. Beale's "Lecture on the Structure of the Tissues of the Human Body."

Medical Society of London, 8½ p.m. Clinical Discussion.

9. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

Royal Institution, 3 p.m. Professor Owen "On Fishes."

Royal Medical and Chirurgical Society, 8½ p.m. Dr. G. M. Humphry "On the Growth of Bones and of Stumps." Dr. Sansom "On the Action of Chloroform."

10. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

Royal Institution, 3 p.m. Professor Helmholtz "On Musical Acoustics."

11. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.

Royal Institution, 3 p.m. Professor Tyndall "On Electricity."

12. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

Royal Institution, 3 p.m. Professor Helmholtz "On the Application of the Law of Force to the Conservation of Organic Nature."

EXPECTED OPERATIONS.

King's College Hospital.—The following Operations will be performed this day (Saturday) at 2 o'clock:—

By Mr. Fergusson—Harelip; Excision of Knee-joint; Amputation of Thigh; Radical Cure of Hernia, two Cases.

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PULVIS JACOBI *VER.*, NEWBERY'S.

To the Medical Profeſſion of Great Britain and Ireland.

GENTLEMEN,—We beg to call your attention to the following extracts from a Paper by the late John Cheyne, M.D., F.R.S.E., M.R.I.A., Phyſician to the Hardwicke Fever Hoſpital, Dublin, and Phyſician-General to His late Majeſty's Forces in Ireland, &c. &c., contained in the "*Dublin Hoſpital Reports*," *vol.* 1, *p.* 317.

"Since this caſe came into my poſſeſſion, I have been led to "make a good many clinical experiments, which have enabled me "to verify the reports which I had heard of the efficacy of JAMES'S "POWDER, in ſometimes removing the APOPLECTIC DIATHESIS in "perſons advanced in life. It is, moreover, worthy of obſervation, "that JAMES'S POWDER has been of remarkable utility in "certain inſtances of DETERMINATION OF BLOOD TO THE HEAD, which "occurred at an early period of life, and threatened to end by "effuſion. Laſtly, in two caſes of GENERAL PLETHORA, in which, "however, the head was more affected than any other part, "JAMES'S POWDER was exhibited by me with perfect ſucceſs."

Alſo *vol.* 1, *p.* 320.

"The following very ſimple method of exhibiting JAMES'S "POWDER, in caſes of undue determination of blood to the "head, is that which I have generally purſued. The patient is "made to begin with a very moderate doſe, not more than two "grains at bedtime, and to increaſe the doſe by half-a-grain every "night, until ſome ſenſible effect is produced upon the ſtomach, "bowels, or ſkin. Should the ſtomach be affected with ſickneſs, "the doſe muſt be leſſened by one grain on the following night. "By the addition of a little rhubarb to it, a larger quantity of "JAMES'S POWDER may be adminiſtered than the ſtomach could "otherwiſe bear. If the ſkin is ſoftened, or the bowels affected, "the doſe ſhould not further be increaſed, but it muſt be repeated "every night for a conſiderable length of time: in ſeveral inſtances "I have known eighteen or twenty grains taken for a conſiderable "period without any inconvenience."

The following extract (ſhowing the increaſing eſtimation in which the true Dr. James's Powder is held by Medical Practitioners) is taken from "The Lumlæan Lectures," 1858-59, delivered before the Royal College of Phyſicians, by A. Tweedie, M.D., Phyſician to the London Fever Hoſpital, who is admittedly one of the higheſt practical authorities on the ſubject of Fever. He ſays, ("*The Lancet*," *June* 16, 1860, p. 590,) as follows:—

"If the febrile excitement be ſuch as to require antimonial prepa- "rations, a pill containing 2 or 3 grains of James's Powder (prepared by "Newbery) ſhould be taken at intervals according to circumſtances."

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" University College Hospital, Oct. 29th, 1858.

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ORIGINAL LECTURES.

LECTURES
ON
THE SPINAL CORD,
DELIVERED AT
The College of France,
DURING THE SUMMER SESSION 1860,

By M. CLAUDE BERNARD,
Member of the French Institute; Professor of General Physiology at the Faculty of Sciences, &c.

LECTURE XI.

ON THE VARIATIONS OF EXCITABILITY IN ALL LIVING TISSUES.

Summary: The Excitability of all Tissues increases shortly before Death—When a Nerve has been divided, a Temporary Exaggeration of its Powers is observed, firstly, In the Main Trunk: secondly, In its Principal Branches; thirdly, In its Ultimate Ramifications—The Muscles form no exception to the General Rule—Application of these Views to Nosology—Peculiar State of the Nerves in Hysteria, in Paralysis, and in all Anæmic Patients—The Sympathetic Nerve enjoys, in this respect, Properties similar to those of the Cerebro-Spinal System—The Temperature of the Body rises a few instants before Death—Experiments on the Electric Current in Muscles—Various Methods of reducing Animals, which belong to the Higher Species, to the Condition of Batracians, firstly, By dividing the Upper Portion of the Spinal Cord; secondly, By exposing them to intense Cold; thirdly, By dividing all the Respiratory Nerves—Muscular Contraction viewed as a Stimulus capable of acting upon the Motor Nerves.

GENTLEMEN,—Notwithstanding all the difficulties which attend experiments upon the Nervous System, and in spite of all the discrepancies occasioned by the alternations of heat and cold, the changes of the weather, the seasons of the year, the healthy or diseased state of the subjects employed, and, lastly, the various degrees of sensibility which exist in various kinds of animals—one fact, at least, has now been proved beyond the possibility of a doubt; namely, that, on the point of dissolution, all living tissues exhibit a transient exaltation of this characteristic property. In the nerves, we have recently shown this to be the case; in the muscles, as you have just been informed, the same process takes place a few moments later, that is to say, immediately after the death of the corresponding nerves. A general rule presides over all these phenomena, and regulates the order in which they succeed each other. When the sciatic nerve (or any other voluminous trunk) has been divided, a series of successive modifications, which ultimately end in death, make their appearance; the process of disorganization begins in the central portion of the nerve, and advances towards its extremities; its peripheral ramifications still enjoy a certain degree of excitability after all vestiges of this faculty have disappeared in the main trunk. The temporary exaggeration of activity, which is the immediate precursor of death, follows precisely the same course; it arises, at first, in the primitive trunk, descends to its branches, and finally spreads to its distant extremities; and the action of poisons obeys the same law; it radiates from the centre to the circumference of the system. The muscular apparatus being, as it were, superadded to the Nervous System, experiences in its turn a similar succession of change, when the process of dissolution has reached it at last; that is to say, when the last remnant of nervous influence has vanished. Nor does this property belong to muscles and nerves alone, we meet with it in all living tissues; in short, the taper that burns in the socket flashes once more before it dies.

The application of this proposition to Nosology suggests numerous and important remarks. Exaggerated activity in any part of the economy is in general a sign of debility, but more particularly so when the nerves are affected. In hysterical females we meet with a remarkable instance of this, for the morbid sensitiveness which exists in such cases is one of the most prominent symptoms of the disorder. A similar state of things frequently coincides with paralysis. A peculiar irritability on one side of the face has more than once been noticed in patients on the eve of being struck with facial hemiplegia, and the attention of Medical observers being now directed to this point, a certain degree of nervous excitement will doubtless be remarked in other cases of paralysis. It is besides a well-known fact that anæmic and debilitated patients labour under a permanent state of nervous irritability, which is not found to exist in persons in the full enjoyment of health. Hence arose the ancient adage "Sanguis moderator nervorum," which proves once more that the transitory excitement here alluded to, far from indicating an accession of strength, is one of the earliest signs of decay.

The sympathetic nerve does not escape the action of this universal law. Its functions, when at the point of ceasing altogether, exhibit a short-lived exaltation, which is principally revealed by vascular phenomena. In agonizing patients, for example, the temperature of the body, after undergoing a considerable depression, suddenly rises to its former level during the last moments. This fact has in particular been noted in those who die of cholera by M. Doyère. The variation, in these patients, often occupies an extent of several degrees, and the body is not unfrequently found warmer after death than during life. In no case, however, does the post-mortem temperature rise above 36° Cent. (97° Fahr.). These singular phenomena being the result of a paralysis of the sympathetic nerve, will be more fully discussed when we come to study its action upon the vessels.

We are now prepared, Gentlemen, to repeat in your presence the experiments which failed at our last meeting, on the electric current of the muscles, and the possibility of creating contractions in amputated limbs by means of its influence: our chief object being, at present, to convince you that animals which possess a constant temperature may be reduced to the condition of those which under various circumstances exhibit different degrees of heat, and are in common language described as cold-blooded animals. The division of the spinal cord brings on this state, but we must not consider it as the mere result of an ordinary paralysis: for if we were to cut the spinal axis in another point, we should not give rise to the same effects; the upper portion of the cervical region, above the orifice of the fifth cervical pair, is the point selected for the operation, which then brings on paralysis of all the respiratory branches, the phrenic nerves alone excepted. Life is thus prolonged for the space of a few hours, but a notable diminution of temperature is of course produced. Under these circumstances, the muscular irritability persists long after death, as in the case of the lower animals.

The same result might be attained by exposing the animal to intense cold: the temperature of the blood must then be lowered several degrees below its usual state, without, however, exceeding certain limits, beyond which life can no longer be maintained. In frogs, the blood may be brought down to the freezing-point, for, as long as it is not congealed within the vessels, circulation continues, and the animal may be restored to its former state; but, in mammals, as soon as the blood sinks to 18° Cent. (65° Fahr.) death is inevitably the consequence; nothing can possibly revivify the animal, which rapidly perishes, in spite of all the stimulants employed to restore its warmth. When the temperature has been lowered to 22° Cent. (71° Fahr.) the animal is capable of returning to life, when proper means are adopted for this purpose; if left to itself, however, it dies invariably. If the blood is at 32° Cent. (90° Fahr.) the unassisted efforts of Nature are sufficient to replace the economy in its normal state, provided the freezing process is suspended at this step of the experiment.

The same result might equally be obtained by successively dividing all the respiratory nerves, without cutting the spinal cord; but so painful and tedious an operation would, in practice, be attended with great difficulties. We have, therefore, been satisfied with dividing the spinal axis in its upper portion as before. Six hours are generally required to produce the necessary degree of cold; we have, therefore, selected guinea-pigs in the present instance, these animals being reduced with greater facility to the state in which we intend to place them. We shall, besides, compare them with a rabbit, which has undergone the same operation this morning.

[A thermometer being introduced into the rectum of guinea-pig, indicates a temperature of 22° Cent. The sam degree is found to exist in the rabbit.

The guinea-pig is then killed, by dividing the medulla

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oblongata; one of its paws being removed from the body, and the sciatic nerve being laid bare, it is placed in contact with the cut surface of a muscle taken from the animal. Contractions are immediately produced. The experiment is repeated on the rabbit, without, however, sacrificing the animal, and a similar result is obtained.]

The phenomena which you have just witnessed, Gentlemen, are never met with in warm-blooded animals in the normal state; we are, however, able, as you perceive, to produce them at will, by placing the subjects in certain given conditions; this property, therefore, exists in mammals, as well as in reptiles, but disappears more rapidly after death in the former than in the latter.

Nor is this all. In the experiment which has just been performed the nerve is placed in contact with the cut surface of a muscle, and the current which passes through this muscle gives rise to contractions in the corresponding limb. But the same result is obtained by placing the nerve in contact with a muscle at the moment when it contracts; M. Matteücci calls this secondary contraction. The heart being the only muscle which is constantly in motion, is generally employed for the purpose of demonstrating this fact. The rabbit which lies on the table, being still alive, is perfectly fit to serve for this latter experiment.

[The animal's chest being opened, the heart's pulsations are still visible; and the sciatic nerve being placed in contact with its surface, each pulsation gives rise to corresponding movements in the amputated limb.]

ORIGINAL COMMUNICATIONS.

ON THE ACTION OF CERTAIN SUBSTANCES UPON PHTHISIS.

By RICHARD PAYNE COTTON, M.D.,

Fellow of the Royal College of Physicians, London; Physician to the Hospital for Consumption and Diseases of the Chest, Brompton.

No. V.—Liquor Potassæ.

My last report having reference to the action of a mineral acid upon twenty-five cases of consumption, I have now to record some experiments on the (chemically) opposite treatment by a pure alkali, in the same number of unselected Hospital in-patients.

I administered fifteen minims of liquor potassæ two or three times a-day, sometimes slightly increasing each dose. Of the patients ten were males and fifteen females; their ages varied from fifteen to forty years; eight of them were in the first stage, four in the second stage, and thirteen in the third stage of the disease.

Of the twenty-five cases, two slightly improved; one greatly improved; and twenty-two appeared to be uninfluenced by the treatment. In only one instance, however, did it disagree with the stomach; in all the rest it seemed to be inoperative either for good or harm. In the two slightly improved cases quinine and iron were afterwards administered with a more satisfactory result; and in the one greatly improved, the liquor potassæ was changed for a vegetable tonic, without any alteration in the general progress. Eight patients gained slightly in weight; nine lost weight; and eight experienced no change in this particular.

Of the twenty-two patients in whom the liquor potassæ seemed inoperative, nine improved under a change of medicine, some of them, indeed, to a marked extent; thirteen, however, experienced no amendment under the like change, being apparently in a condition of disease hardly amenable to any kind of treatment.

With this result, it may be interesting to couple a statement contained in the preceding report, that four patients who had been deriving benefit under the influence of *dilute hydrochloric acid*, unhesitatingly declared that they progressed to a much less extent during the brief period in which this remedy had been experimentally changed for *liquor potassæ*.

In the days of some of our professional ancestors, liquor potassæ enjoyed a considerable reputation as a remedy in phthisis, from its supposed so-called "deobstruent" action. Of late years, however, it has fallen, I believe, comparatively into disuse, and is not often prescribed, except perhaps to meet an occasional complication.

To these experiments, as well perhaps as to some which have preceded them, it may possibly be objected, that the period of trial was not sufficiently prolonged. From a conviction, however, that the time spent within an Hospital is too valuable to the patients to be unnecessarily sacrificed to experiment, it has always been my habit not to persist with any one treatment for a longer period than two or, at most, three weeks, whenever it appeared that the patient was deriving no benefit, or when it seemed probable that the use of some other medicine might be followed by a happier result.

It would be foreign to the object of this communication to enter upon the action of any of the salts, either of potassa or the other alkalis. I may briefly remark, however, that for certain dyspeptic complications of phthisis, several of these rank very highly as remedial agents.

From the preceding observations, coupled with the results already obtained from the use of hydrochloric acid, as recorded in my last communication, I think we may fairly arrive at the following conclusions:—

1. That liquor potassæ, in moderate doses, rarely disagrees with consumptive patients, but is quite as rarely productive of any good effect.

2. That the so-called tubercular *crasis* is very much more likely to be relieved by the mineral acids than by the alkalis.

Clarges-street, Piccadilly.

APHORISMS AND OBSERVATIONS UPON CERTAIN DISEASES OF THE ORGANS OF SIGHT.

By W. R. WILDE, M.D., F.R.C.S.

Surgeon Oculist in Ordinary in Ireland to the Queen; Surgeon to St. Mark's Ophthalmic Hospital, Dublin.

(Continued from p. 362.)

The black, or rather gray, ointment, made of nitrate of silver and lard, or spermaceti, from five to twenty grains to the drachm, as originally recommended by Mr. Guthrie for applying to the conjunctiva and cornea, has now been so long out of use that it is only necessary to allude to it as a matter of history. When in attendance at the Charing-cross Ophthalmic Hospital about twenty years ago, I remember seeing a number of ointments among the Ophthalmic Pharmacopœia of the late Mr. Guthrie, and of these the most frequently used were those compounded of the sulphate and acetate of copper. Dr. Michael Ryan, of Dublin, in a paper read before the Association of the College of Physicians, in 1823, and published in Vol. iv. of their *Transactions*, upon "Ophthalmia and Opacities of the Cornea," recommended the use of "one drachm of the nitrate [of silver] to one ounce of axungia, which unguent (he says) produced the most decided good effects." Notwithstanding this approval, and the subsequent recommendation and extensive use of this ointment by Mr. Guthrie, it has long since, and most deservedly, been exploded from the Oculists' Pharmacopœia. The use of these, as well as other powerful and excessively painful caustics, stimulants, and ointments, both in the solid, fluid, and unctuous form, crammed into the eyes of the patients who sat in the inspection-room of the Charing-cross Hospital, produced such agonising screams from the children, such whines from the young, and such groans from the aged as will not be forgotten, I am sure, by any of those who formed a portion of the great military Surgeon's clinical class from 1839 to 1841. On the other hand, the practice at Moorfields, especially under its then head, Mr. Tyrrell (who professed to cure granular lids without any local application whatever), was an error into which that gentleman appears to have been led in his zeal to correct the over stimulation employed in the West-end Institution. A very useful application to the lids is an ointment composed of four or five drops of the liquor plumbi diacetatis, well rubbed up with about two drachms of the "unguentum Galeni" of the old Pharmacopœias, or what is now called "cold cream." This latter, however, should be made up with rose-water alone, and not otto of roses, which is sometimes added to increase the perfume, but which is very smarting to the eye. Cucumber cream may be employed for the same purpose, and is a nice cooling ointment. The

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late Abraham Colles (when I had charge of the eye-patients in Steevens' Hospital for many years) used to recommend the introduction beneath the upper lid of the old, hard, yellow citrine ointment, slightly softened by rubbing between the fingers, as a useful remedy in cases of pannus and granular lids. I cannot say anything in its favour. Lately, Professor T. Wharton Jones has employed sulphur ointment in similar cases, under the impression that the granular state of the villi of the conjunctiva should be considered as a parasite. I understand, however, that it is used in connection with repeated and extensive scarifications.

Belladonna has been the greatest boon ever conferred upon Ophthalmic Medicine; more eyes have been saved by it than any other special or single remedy within the range of the Pharmacopœia of the oculist; and without it it would not be possible to perform many operations on the eye with certainty, and others not without great risk. As the history of this remedy must be a matter of interest to the Ophthalmic Surgeon, and is still involved in considerable obscurity, a few observations thereon may not be out of place here. The Atropa, or Deadly Nightshade, was known as a poison to the ancients, and portions of it were used as a cosmetic to beautify the skin, but in what manner, whether as a lotion, or by infusion in a bath, has not been clearly stated. Hence, however, the name "bella donna;" but when this term was first applied I have not been able to discover. In Caspar Bauhin's Medical Botany, attached to Matthioli's great work, printed in 1598, the nightshade is thus alluded to:—"Veneti vero vulgo Herba bella donna Solanum somnificum Dioscorides esse existemant,"—p. 756; and he gives a figure of the plant under the head of "Solanum majus sive herba Belladonna." In the *Dictionnaire Universel de Matière Médicale*, by Dr. F. V. Mèrat and A. J. De Lens, will be found much useful information upon the subject: they say the name arose from the circumstance of the Italian ladies washing themselves with its distilled water. Pultney says that Clusius was the first botanical writer who gave the name belladonna. It would appear that the ancients were acquainted with the poisonous properties of the deadly nightshade, and probably knew that dilatation of the pupil was one of its most prominent symptoms; but its local action does not appear to have attracted attention, nor been made use of, in Ophthalmic Medicine till about the end of the last century. The local mydriatic action of henbane, stramonium, and other similar herbs had been known previously, for Galen, Van Swieten, and Ray, the Naturalist, were acquainted with them. Keogh, in his "Irish Herbal," published in 1735, says "the nightshade wonderfully cures inflammation of the eyes." A German Physician, Dr. Daries, in his inaugural dissertation, "De Atropa Belladonna," published at Göttingen in 1777, says that in preparing the extract of this plant for Reimarus of Hamburg a drop of the expressed juice of the recent fruit and flower spirted into his eye, in consequence of which he suffered from blindness and other alarming symptoms, which have been detailed by Reimarus, who subsequently proposed the use of belladonna in the operation for cataract; and in the *Memoires de la Société Philomatique* for 1797 it is mentioned that Dr. Grassmeyer, of Hamburg, had some time previously employed it with success in the extraction of cataract. Himly, however, gives the credit to Loder, but does not specify the date in which that Surgeon used it.

Somewhat subsequently the elder Himly, of Göttingen, had become acquainted with the dilating powers of hyoscyamus, and recommended its use in ophthalmic diseases and operations for cataract; and I believe it was he who first applied the term mydriatic (or a producer of mydriasis) to drugs of this description. The fact is worthy of note only so far as showing that the high-sounding titles for certain lines of treatment employed by some authors in the present day have no more definite meaning than many of the botanical or chemical appellations, often derived from words of two different languages, now in use in the schools. George Chandler, a Surgeon of London, who published a very good "Treatise on the Diseases of the Eye, and their Remedies," in 1780, says that Dr. Buchan "affirms that he has himself resolved a recent cataract by giving the patient frequent purges with calomel, keeping a poultice of fresh hemlock constantly upon the eye, and a perpetual blister upon the neck. Sauvage extolls the white henbane as a specific in this case."—P. 165. No doubt all these remedies owed their reputation to their mydriatic powers, just as modern cataract-curers without operation employ belladonna with the same object.

The earliest notice of Reimarus' communication which I can find in any English work is that in the April number of the *Medical and Physical Journal* for 1800, Vol. iii. p. 367. In the July following, Mr. Wainwright, of Dudley, addressed "Observations on the Belladonna" to the editors of that periodical, and in alluding to the case related by Ray of dilatation of the pupil from the application of the atropa leaf to a sore in the neighbourhood of the eye, stated, "Twelve years ago I became acquainted with this fact from accidental and personal experience; and in 1791 I mentioned this remarkable effect of the belladonna to the Physical Society of Guy's, and at the same time stated my expectation that advantage would arise from its application in certain diseases of the eye. I have been in the habit of applying the juice and extract of the belladonna diluted with water very freely in many cases of inflammation of the eye for several years. . . . The use of the belladonna does not in any way weaken or injure the sight. . . . There is no doubt in my mind but that the external use will be found greatly to facilitate the operations for the cataract."—Vol. iv. p. 5. It is, therefore, manifest, that to Wainwright belongs the credit of the introduction of this valuable remedy into ophthalmic practice into England, although his claims appear to have been passed over by systematic writers on the subject. Himly, in his "*Krankheiten und Missbildungen*," published in 1843, attributes the introduction of it to Thomas Paget, of Leicester, and refers to the *Edinburgh Medical and Physical Journal* for 1801. Paget, however, wrote in the sixth volume of the same Journal as Wainwright, and not in the *Edinburgh Medical and Surgical Journal*, which did not appear for some years later, and in his letter acknowledges that it was the favourable report given by Wainwright of the use of belladonna, which "induced him to give it a trial as soon as an opportunity should occur." But long before any of these observations were made, even in classic times, Practitioners were acquainted with substances capable of dilating the pupil, as shown by the following extract from Pliny:—"Utriusque anagallidis, feminæ et maris, succus pupillas dilatat et ideo hoc inunguntur quibus paracentesis fit;" and it is said that these varieties of primrose are still used as mydriatics in Persia. Those who would be well acquainted with the Atropa—a term, by the way, first given by Linnæus,—I beg to refer to Mr. Richard Pultney's learned treatise communicated to the Royal Society in 1757, and entitled, "A Brief Botanical and Medical History of the Solanum Lethale, Belladonna, or Deadly Nightshade," published in the *Philosophical Transactions*, Vol. L. p. 62, for 1757. In 1803 the distinguished J. A. Schmidt, of Vienna, made a series of experiments with belladonna and hyoscyamus, the results of which were given in the *Ophthalmologische Bibliothek* for that year. When Saunders wrote his essay in the *London Medical and Physical Journal*, in July, 1806, "On Inflammation of the Iris, and the Influence of the Extract of Belladonna to Prevent the Consequent Obliteration of the Pupil," it would appear that belladonna was in very general use; for he says, when speaking of the lymph-deposits in the capsule of the lens, "Happily we are furnished in the extract of belladonna with a perfect specific for this purpose. It is already well known that the application of this substance to the surface of the conjunctiva excites so strong a contraction in the radiating fibres of the iris, that the pupil is remarkably enlarged, and the whole of the crystalline lens becomes apparent."—P. 58.

The next most valuable communication upon the subject is that by Mr. Wishart "On a Case of Congenital Cataract, with some Observations on the Means of Artificially Dilating the Pupil in the Operations of Extracting and Depressing the Cataract," published in the *Edinburgh Medical and Surgical Journal* for January, 1813. From thence to the present time, the use of this substance is so well known and so generally employed, that there is little to add to the foregoing history, until the discovery of atropine, the alkaloid or active principle of belladonna, by Brandes in 1819. It was not, however, introduced into practice in this city until I began to employ it in 1844—see my article "On the Efficacy and Mode of Administration of Belladonna and Atropine," published in the *Dublin Quarterly Journal of Medical Science*, Vol. ii. p. 553.

(To be continued.)

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PRACTICAL HINTS ON THE ACCOMMODATION OF THE EYE, ITS ANOMALIES AND THEIR TREATMENT.

By Mr. J. SOELBERG WELLS.

HAVING been frequently asked by students and Medical men to give them some simple and elementary information upon the subject of the accommodation of the eye, and the affections connected with its anomalies, I have been led to think that a few simple hints and facts illustrative of this subject, might not be altogether uninteresting or uninstructive to such of your readers as have not the leisure to devote themselves to the thorough comprehension of this somewhat abstruse and difficult question. Allow me, therefore, to give in as short a space as possible some of the more leading points by which we should be guided in our diagnosis and treatment of this class of cases.

By the term Accommodation is meant that power resident in every normal eye of adapting itself imperceptibly, almost unconsciously, to different distances. At one moment regarding an object held but a few inches distant, at the next, without any effort, taking in at a glance the vast expanse of miles of scenery. This accommodation is brought about by a change in the form of the lens. Formerly it was supposed that the cornea underwent some alteration in its curvature during the act of accommodation; but Helmholtz has shown by his ophthalmometer that this is not the case. The external muscles of the eyeball were also considered by some to play a very important part in this phenomenon; but von Graefe has reported a case in which all these muscles were paralysed, and yet the accommodation remained intact! Again, the iris was, and is still by some, considered one of the chief factors in causing the change in the shape of the lens during accommodation. But that the iris is not of much, if any, consequence in this, is sufficiently proved by the case of irideremia totalis which occurred last year in Professor von Graefe's Clinique (a), and in which, in spite of the complete absence of the iris, the power of accommodation was good. Helmholtz has shown that the anterior surface of the lens undergoes a change in curvature (becoming more convex) during accommodation for near objects; and there is now no doubt that this is brought about chiefly, if not solely, by the action of the tensor choroideæ muscle.

The term "range of accommodation" is often employed; by it we mean the range which exists between the nearest and furthest point of distinct vision. Donders determines it thus: "I take the liberty, therefore, of proposing a standard as a general expression for the range of accommodation. The range of accommodation A (which may be calculated through the distance which p and r, the nearest and furthest extreme point of accommodation, are from the anterior surface of the crystalline lens), is given by the focal distance a of an ideal lens, which, placed upon the anterior surface of the crystalline lens, would afford to rays emanating from the near point a direction as if they came from the far point. We must suppose this lens to be a meniscus placed upon the anterior surface of the crystalline, because the accommodation depends almost exclusively upon a change in the convexity of the anterior surface of the lens" (b). We can easily understand that a may be approximatively found by the formula $\frac{1}{r} - \frac{1}{p} = \frac{1}{a}$, and that $A = \frac{1}{a}$.

The nearest point of distinct vision lies, in a normal eye, about 3½ to 4 inches from the eye; but for continued work at the finest objects, engraving, etc., it lies at about 5 inches from the eye; few eyes, indeed, can bear to work for any length of time with the object nearer than this. The furthest point of distinct vision in the normal eye is said to be at an infinite distance (from which the rays of light emanate parallelly). Graefe, however, thinks that the natural far point does not lie at an infinite distance, but on this side of it, and that a normal eye only accommodates for parallel rays by the aid of accessory powers exercising slight pressure on the eyeball.

Let us illustrate Donders' way of determining the range of accommodation by an example or two.

I. Normal eyes, which can see from an infinite distance up to 4″ from the anterior surface of the crystalline lens, have $r = \infty$, $p = 4$, $A = \frac{1}{4} - \frac{1}{\infty} = \frac{1}{4}$ (c).

II. In myopic eyes, in which $r = 12''$, $p = 4''$, $A = \frac{1}{4} - \frac{1}{12} = \frac{1}{6}$.

III. In presbyopic eyes having $r = \infty$ $p = 12$, $A = \frac{1}{12} - \frac{1}{\infty} = \frac{1}{12}$.

IV. Hyperpresbyopic patients who with a convex glass of twelve inches (Paris) focus (placed half-an-inch before the crystalline lens) have $r = \infty$, $p = 6\frac{1}{2}''$, have A about $= \frac{1}{6} - \frac{1}{\infty} = \frac{1}{6}$, or, more accurately, if we take into consideration the distance between the glass and the eye, $= \frac{1}{5}\frac{1}{5}$ (d).

We may test the range of the accommodation by means of von Graefe's fine wire optometre, but as this requires some intelligence and exactitude on the part of the patient, it is generally more practical and easy to let them read No. 1 of Jæger's test type, by moving this a few times alternately nearer and further from the eye, we can soon ascertain with exactitude the nearest and furthest point of distinct vision.

We meet with several deviations from the normal accommodation. (Pareses of accommodation.) Thus, for instance, the near point may be normal, but the far point approached nearer to the eye, this is often mistaken for myopia; or the far point may be normal and the near point moved away further from the eye; or both near and far point may have changed their normal position, and become approximated towards each other.

We may also meet with a dislocation of the territory of accommodation without any diminution in its range. If we furnish such eyes with glasses which will bring the territory of accommodation back to its normal distance from the eye, their vision will be quite perfect again.

In a normal eye, the furthest point should lie at an infinite distance, so that the eye in accommodating for its furthest point should unite parallel rays upon the retina. Its nearest point should be from 3½″ to 5″ distant from the eye. Even a near point of 7″ distance cannot be considered pathological.

Donders classifies eyes according to the furthest point of distinct vision, and distinguishes three categories:—

1. *Normal*, or *emmetropic* eyes, in which parallel rays are brought to a focus on the retina.

2. *Myopic*, or *brachymetropic* eyes, which are adjusted for divergent rays. In this case parallel rays are, even when the eye accommodates itself for its furthest point, brought to a focus before the retina; so that distinct images are formed on the retina only of those objects, the rays from which impinge divergently upon the eye.

3. *Hypermetropic* eyes, adjusted for convergent rays. In this case, parallel rays are brought to a focus *behind* the retina.

"In a state of rest the focal point of the dioptric system is situated in myopia *anterior* to, in hypermetropia *posterior* to, the bacillar layer of the retina" (e).

To this group we must add Presbyopia; for although this is not, in point of fact, an anomaly of refraction, but only a limitation of the range of accommodation (the near point being removed further from the eye), it is more practical to concede to it a place amongst these affections, so often is it met with, so continually is it required to be treated; and for want of a better, its name also should be retained.

(To be continued.)

TESTIMONIAL TO MR. LONG, OF LIVERPOOL. — The Medical Students of the Liverpool Royal Infirmary School of Medicine presented the above-named gentleman with a beautiful piece of silver plate, and an elegantly executed, illuminated, and framed address, expressing the high esteem which they entertained for Mr. Long, as a gentleman and teacher of the Profession. An appropriate reply from the learned Lecturer closed the interesting proceedings.

(a) Graefe's "Archiv," Vol. vii. 2.

(b) Graefe's "Archiv," Vol. iv. 1; and Opht. Hosp. Rep. No. 13 Periscope).

(c) ′ Means one foot; ″ inch; ‴ Paris line; r furthest point; p nearest point; A. range of accommodation; ∞ infinite distance.

(d) These examples are given from Donders' paper on "Accommodation," "Archiv," iv. 1; O. H. Rep. 13. In my next I shall give Professor Graefe's method of testing the accommodation by means of a strong convex glass, which is more convenient in normal, presbyopic, or hypermetropic eyes.

(e) Graefe's "Archiv.," Vol. vi. 1, and O. H. Rep., Vol. iii. 1 (New Series). For further information I would refer the reader to Donders' admirable papers in the "Archiv," or to my abstracts of them in the Periscope of the O. H. Rep., Nos. 13 and 14.

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REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

CONDUCTED BY
JONATHAN HUTCHINSON,
Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital,
AND BY
J. HUGHLINGS JACKSON, M.D.

STATISTICAL REPORT OF OPERATIONS PERFORMED DURING THE YEAR 1860.

THE subjoined Report comprises the cases supplied by the following Provincial Hospitals:—

The Derby, Leeds, Leicester, Sussex County, Addenbrooke's (Cambridge), Nottingham, Chester, Cheltenham, West Norfolk and Lynn, Sheffield, Hull, York, Northampton, and Gloucester.

LITHOTOMY.

Of the following Thirty-seven Cases of Lithotomy, two ended fatally, and all the others in recovery. We have carefully specified those cases in which the reports sent to us specify any deviation from the usual lateral method. Thus all reported as "Median," are so described in our list. Whenever only the word "Operation" is used, we have no precise information as to what mode was adopted; but in most of these it is probable that the lateral one was performed. It will be seen that twenty-three of the patients were children under 15 years of age, and thirteen adults above 21, and most of them past middle life. In one instance (Case 36) the age is not stated.

THIRTY-SEVEN CASES OF LITHOTOMY.

Case 1.—The Northampton General Infirmary: Mr. Mash.—A man, aged 52. Symptoms of stone twelve months. Operation. Recovery. *Case* 2.—The Northampton General Infirmary.—A boy, aged 11, pale, thin, and strumous. He had had some time before extensive caries of the bones of the leg, and had suffered urgently from stone for four months. Operation. Recovery. *Case* 3.—The Northampton General Infirmary: A boy, aged 12. Had had urinary symptoms for three years. Operation. Recovery. *Case* 4.—The Northampton General Infirmary.—A delicate-looking boy, aged 12. Symptoms of stone for many years. Severely for the three years preceding the operation. Operation. Recovery. *Case* 5.—The Northampton General Infirmary.—A tall, thin, and very nervous, but healthy man. Had urinary symptoms for eleven months. Operation. A few hours after the operation a very free arterial hæmorrhage occurred. It was arrested by the ligature of a deeply situated vessel. He recovered well. *Case* 6.—The Northampton General Infirmary: Mr. Mash.—A man, aged 66. He had had symptoms of stone for five years. A lithic acid calculus was removed. Recovery. *Case* 7.—The Sheffield Infirmary: Mr. Barber.—A boy, aged 13. Allarton's operation. An oxalate of lime calculus weighing four drachms and ten grains. He never had a bad symptom, passed urine by the urethra on the third day, and left the Hospital quite well three weeks after the operation. *Case* 8.—West Norfolk and Lynn Hospital.—Mr. Marsters Kendall.—A boy, aged 7. Lateral operation. Recovery. The calculus weighed six drachms and eleven grains. *Case* 9.—The Sussex County Hospital: Mr. Blaker.—A man, aged 61. He had symptoms of stone for two years. The lateral operation. At the date of this note the wound was all but healed. *Case* 10.—The Gloucester General Infirmary: Mr. Lovegrove.—A boy, aged 2½ years. Symptoms for two years. Lateral operation. A rough mulberry calculus weighing fifty-five grains was removed. On the sixteenth day, the urine flowed by the urethra. On the thirty-first day, the wound had much diminished, and the boy was taken home. *Case* 11.—The Hull Infirmary: Mr. Craven.—A healthy-looking boy, aged 5. Symptoms for three years. The lateral operation was performed. The stone (lithate of ammonia) was an inch long and three-quarters of an inch broad. Recovery. *Case* 12.—Addenbrooke's Hospital (Cambridge): Dr. Humphry.—A healthy boy, aged 4. Lateral operation. A lithic acid calculus weighing forty-five grains. Recovery. *Case* 13.—Addenbrooke's Hospital (Cambridge): Dr. Humphry. A healthy man, aged 59. Symptom of calculus for about four months. Lateral operation. A lithic acid calculus weighing one drachm. Recovery. *Case* 14.—The Northampton General Hospital: Mr. Mash.—A delicate, puny boy, in feeble health, aged 7 years. He had had symptoms for some years. Operation. Recovery. *Case* 15.—The Northampton General Infirmary: Mr. Mash.—A man, aged 53, pale, and much reduced in health. He had suffered for three years, and very severely for a few months preceding the operation. An oxalate of lime calculus weighing almost an ounce, was removed by the lateral operation. Recovery. *Case* 16.—The Northampton General Infirmary: Mr. Mash.—A boy, aged 9, thin and feeble. Symptoms four months. Operation. Calculus oval and flattened. Recovery. *Case* 17.—The Northampton General Infirmary: Mr. Mash.—A man, aged 52, very stout, weighing seventeen stone. Symptoms one year and a-half. Operation. Recovery. Two uric acid calculi were removed. *Case* 18.—The Chester Infirmary: Mr. Essex Bowen.—A healthy-looking farmer, aged 37. The lateral operation was performed, and a large uric acid calculus was extracted, of a singular trefoil shape, and weighing two ounces two drachms and twenty-four grains. He recovered well, though rather slowly, from the force necessary to the extraction of so large and singularly-shaped a calculus. *Case* 19.—The Leicester Infirmary: Mr. Benfield.—A man, aged 61, who had had symptoms of stone for two years. He had also a urethral fistula opening near the middle point of the perineum. The median operation was performed on June 7, and a phosphatic calculus in several pieces was extracted. He progressed favourably for three or four weeks. He then had an attack of inflammatory œdema of the scrotum, from which he recovered with great difficulty. He left September 1, the fistula being still open. In November it was quite closed, and he had returned to his work. *Case* 20.—The Leicester Infirmary: Mr. Benfield.—A boy, aged 8. He had had symptoms for two years. Some difficulty was experienced in extracting the calculus, which was uric acid, and in shape oblong. Recovered. *Case* 21.—The Leicester Infirmary: Mr. Macaulay.—A pale, unhealthy-looking boy, aged 9. He had had symptoms for three years. An oval uric acid calculus was removed by the lateral operation. Recovered. *Case* 22.—Addenbrooke's Hospital (Cambridge): Mr. Lestourgeon.—A boy, aged 2 years and 6 months. Symptoms of stone for nine months. A lithic acid calculus was removed weighing thirty-two grains. Recovered. *Case* 23.—Addenbrooke's Hospital (Cambridge): Dr. Humphry.—A boy, aged 2 years. A lithic acid calculus. Recovered. *Case* 24.—Addenbrooke's Hospital (Cambridge): Mr. Lestourgeon.—A man, aged 59. He had had symptoms of stone for about a year. Lateral operation, by which four small calculi, weighing two drachms and five grains, were removed. A short time after the operation very troublesome diarrhœa came on; diffuse inflammation, running on to sloughing in the cellular tissue of the pelvis between the bladder and rectum, followed by a fistulous communication. A free incision was made through the sloughy tissues about the wound into the rectum, laying the wound and rectum into one. At the same time he had inflammatory œdema of scrotum going on to sloughing, into which also a free incision was made. For some time he was in a very precarious state, but he ultimately, though slowly, recovered. *Case* 25.—Addenbrooke's Hospital (Cambridge): Dr. Humphry.—A boy, aged 4. Symptoms of stone for two years. Lateral operation. Lithic acid calculus, twenty-two grains. Recovered. *Case* 26.—Addenbrooke's Hospital (Cambridge): Dr. Humphry.—A man, aged 64. Lateral operation. Lithic acid calculus, weighing twenty-three grains. Recovered. *Case* 27.—The Leicester Infirmary: Mr. Paget.—A healthy boy, aged 4, who had had symptoms of stone for nine months. Median operation. Passed urine by urethra first on the fifth day. Recovered without a bad symptom. The uric acid calculus was the size of a kidney bean. *Case* 28.—The Leicester Infirmary: Mr. Paget.—A thin, weak, cachectic boy, aged 7. He had had symptoms of stone from infancy. The stone, a globular, phosphatic one, broke down under the forceps. Recovered well. *Case* 29.—The Leicester Infirmary: Mr.

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Paget.—A man, aged 40. He had had attacks of "gravel" seventeen years, but direct symptoms of calculus one year. His health was very good. Two smooth uric acid calculi were removed. He recovered well. *Case* 30.—The Leicester Infirmary: Mr. Paget.—A boy, aged 3. He had had hæmaturia, pain, and frequent micturition. He was healthy and well nourished. There was great difficulty in the dilating stage. No bad symptom followed. He recovered rapidly. *Case* 31.—The Derby Infirmary: Mr. Gisborne.—A boy, aged 10. Operation. Recovery. *Case* 32.—The Leeds General Infirmary: Mr. Teale.—A very delicate, strumous boy, aged 8. Symptoms of stone had existed seven months. By the median operation an oval calculus weighing five drachms was removed. A considerable amount of sloughing between the urinary passages and the rectum allowed for a time a free intermixture of their contents. Finally all closed up, and the parts were restored to their normal condition. *Case* 33.—The Leeds General Infirmary: Mr. Smith.—A boy, aged 7, the subject of stone for four years. Lateral operation. A small lithic acid calculus was removed. Recovered. *Case* 34.—The Leeds General Infirmary: Mr. Smith.—A boy, aged 8, had suffered from stone five years. A small mulberry calculus weighing twenty-five grains was removed by the lateral operation. Recovered. *Case* 35.—The Hull Infirmary: Dr. Lunn.—A pale, delicate-looking man, aged 24. Symptoms of stone for two years. By the lateral operation a calculus weighing ten drachms was removed. Recovered.

Fatal Cases.

Case 36.—A male; calculus in the bladder. Symptoms for four months. Operation. Death. *Case* 37.—A very feeble man, aged 61, the subject of stone for twelve years. The lateral operation was performed, and a large oval calculus, weighing nearly two and a quarter ounces, was removed. He sunk with symptoms of peritonitis three days afterwards. The *autopsy* showed extensive pelvic infiltration to be the cause of death.

HERNIOTOMY.

In the following list of operations for strangulated hernia we have twenty-five cases, with sixteen recoveries and nine deaths. This proportion is probably close upon the average. It will be seen that in almost all the cases the hernial sac was opened. In many of the cases the bowel had been strangulated for long periods prior to the patient's admission at the Hospital, and in not a few treatment by purgatives had been pursued. To these combined errors—delay and purgation—several of the deaths are no doubt directly due. The fact cannot be made too widely known that not a few of the cases of hernia admitted into Hospitals are in a hopeless state at the time owing to the delay which has been permitted.

Many of the individual cases are of special interest. We may direct attention particularly to the last two. Case 25 will interest those who have had much to do with these operations, as an instance in which a small knuckle of gut was so concealed behind omentum that it was not discovered during the operation. The circumstances of the case in respect to the suppuration of the sac were also peculiarly complicated, and prevented the enlargement of the ring, which, under other circumstances, would have been indicated.

A case which we have appended, but in which no operation was performed, shows that in cases of long-standing strangulation even reduction by the taxis is not always without risk, nor indeed the best practice. Had the contents of the sac been examined by an operation, it is probable that the man would have had a better chance.

Twenty-five Cases of Operations for Strangulated Hernia.

Case 1.—The Sussex County Hospital: Mr. Furner.—A man, aged 26. He had had inguinal hernia six or seven years, and had worn a truss until a short time before the strangulation. The operation was performed seventeen hours after the strangulation had occurred. The sac was opened. Under treatment. He was doing well on the seventh day. *Case* 2.—The Hull Infirmary: Mr. Craven.—A strong, muscular man, aged 29. He had had hernia (inguinal) ever since he was two years old. He had always worn a truss, but at 8 a.m. of the day of his admission the truss broke, and the hernia came down. There was a large scrotal hernia on the left side, which was very hard, tense, and painful. Operation: the sac opened. Recovery. *Case* 3.—The West Norfolk and Lynn Hospital: Mr. Masters Kendall.—A man, aged 45. Inguinal hernia, strangulated twenty-four hours. He was suffering great pain, and had stercoraceous vomiting on June 18. Attempts at taxis under the influence of chloroform having failed, an operation was performed; sac opened. On the fourth day after the operation fæcal matter came through the wound (the bowels had been previously moved two days after the operation); this continued for three days; the bowels then again acted naturally. From this time he steadily improved, and was discharged quite well on August 10. *Case* 4.—The Sheffield Infirmary: Mr. Barber.—A woman, aged 41. Femoral hernia on the right side, strangulated twelve hours. Operation: sac opened. Recovery. Two years before she had been operated on for strangulated femoral hernia on the left side, in this Hospital. *Case* 5.—The Sheffield Infirmary: Mr. Favell.—A woman, aged 34. Strangulated (twelve hours) femoral hernia on the right side. Operation: sac opened. Recovered. *Case* 6.—The Gloucester General Infirmary: Mr. Lovegrove.—A woman, aged 23.—She had had femoral hernia fourteen months. It had been strangulated sixteen hours. Operation: sac opened. Recovery. *Case* 7.—The Leeds General Infirmary: Mr. Smith.—A man, aged 49, the subject of right femoral hernia the size of a fist. He was operated upon when strangulation had existed twenty-two hours. The sac contained adherent omentum, and a small knuckle of intestine. The omentum was cut off. He recovered rapidly. *Case* 8.—The Leeds General Infirmary: Mr. Smith.—A man, aged 47. Inguinal hernia on the right side, about the size of two fists. Strangulation had existed eleven hours. Operation: the sac was not opened. Diffuse inflammation and sloughing of the scrotum retarded recovery somewhat. *Case* 9.—The Leeds General Infirmary: Mr. Teale.—A woman, aged 51. Femoral hernia on the right side, as large as a hen's egg, strangulated twenty-six hours. Operation: the sac not opened. Recovered. The bowels did not act until the eleventh day after the operation. *Case* 10.—The Leeds General Infirmary: Mr. Smith.—A woman, aged 32, the subject of a small right femoral hernia. Strangulated nine hours. The sac contained adherent omentum and a knuckle of intestine. The omentum was cut off. Bowels acted on the sixth day. The recovery was rapid. *Case* 11.—The Leeds General Infirmary: Mr. Hey.—A woman, aged 60, was operated on for right inguinal hernia the size of a hen's egg. Strangulated thirty-three hours. Sac not opened. Recovered. *Case* 12.—The Leicester Infirmary: Mr. Benfield.—A woman, aged 43, the subject of femoral hernia two years. She had never worn a truss. This time the hernia had been down four days, during which time she vomited frequently, and the bowels had not been moved. Operation: sac opened. Recovery. *Case* 13.—The Leicester Infirmary: Mr. Macaulay.—A woman, aged 46. Femoral hernia, down forty-eight hours. Operation: sac opened. Recovery. *Case* 14.—The Nottingham Hospital: Mr. Thomas Wright.—A man, aged 63. Inguinal hernia of the right side for seven months. Strangulated a few hours. Operation: sac opened. Recovery. About twenty-four hours after the operation he had symptoms of peritonitis; opium was given, and leeches applied, and the symptoms soon passed off. *Case* 15.—The York County Hospital: Mr. Keyworth.—A man, aged 72. Large scrotal hernia. Operation. Recovery. *Case* 16.—The Cheltenham General Hospital: Mr. Eves.—A man, aged 57, umbilical hernia, strangulated three days. Operation, June 14. A large mass of omentum and a small knuckle of intestine. Discharged cured, July 7.

Fatal Cases.

Case 17.—A woman, aged 50. A small right femoral hernia strangulated eleven days, during which time purgatives had been perseveringly administered. The sac contained about ten drachms of fluid, and a small knuckle of intestine very much inflamed. She sank three weeks afterwards from pneumonia, having quite recovered from the hernia, as was proved on post-mortem examination. *Case* 18. A woman, aged 55, femoral hernia in the right side. It had been strangulated nineteen hours. The sac contained a large mass of congested omentum and a small portion of gut. The omentum was removed. Immediately after the operation, violent purging set in, and continued for two days, when it

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suddenly ceased, owing to a further descent of intestine. To return this was found impracticable, owing to the softened condition of the intestine and the extensive adhesions which had formed around the ring within the abdomen. The operator, therefore, slit up a portion of the bowel, and, as the flow of fæces had ceased in two days, the incision was repeated at another part. She sank eight days after the operation. At the *autopsy* very extensive peritonitis was found. Two distinct coils of small intestine had escaped by the femoral ring, the one which had been first opened being nearer the anal termination than the others. *Case* 19.—A woman, aged 50. A right inguinal hernia of two or three years' duration, for which she had never worn a truss. Vomiting and constipation commenced six days before admission. She had been treated by purgatives, but the cause of the constipation had not been detected until the morning of her admission, although the matter vomited was stercoraceous. She was in a very bad state when the operation was performed. The sac was opened and the bowel found rather sloughy. It was, however, returned into the abdominal cavity. She died eight hours after the operation. At the autopsy the knuckle of intestine was found perforated in two places, and there was fæcal extravasation into the peritoneal cavity. *Case* 20.—A woman, aged 50, inguinal hernia of the left side. Operation: sac opened. Peritonitis. Death on the ninth day. *Case* 21.—A woman, aged 60, femoral hernia of the right side, strangulated thirty-five hours. Operation: sac opened. The bowel being found gangrenous it was not returned. She lingered sixteen days, and then died of exhaustion. *Case* 22.—A feeble woman, aged 30, the subject of femoral hernia for seven years. Strangulation, twenty-six hours. Operation: sac opened. Death. *Case* 23.—A man, aged 32, the subject of inguinal hernia on the left side for two years. An operation was performed five hours after strangulation. The hernia was about the size of an adult's head. Several feet of intestine were down. Great difficulty was experienced in returning the gut. Opiates were given freely, and he suffered intense pain. He died eleven hours after the operation. Before death he passed about three-quarters of a pint of blood by stool. At the *autopsy* a large portion of the small intestine was found coated by recent lymph, and the whole canal was filled with bright fluid blood. The stomach contained a small quantity of discoloured blood. *Case* 24.—A woman. Femoral hernia, strangulated four days. Operation: sac opened. Omentum and bowels gangrenous. Death from exhaustion in twenty-six hours. *Case* 25.—A man, aged 59. A large inguinal hernia the size of an adult's head, strangulated seven hours. Free purging took place after the operation. He sunk five days later from peritonitis, as shown at the *autopsy*. *Case* 26.—"M. H., a woman, aged 59, was admitted on the evening of June 1, 1860, with femoral hernia on the right side. She had been ruptured twelve years but never wore a truss. On May 25, it came down more than usual, and was painful. Bowels acted on that day; had not acted since. She continued in pain with occasional, but not very frequent, vomiting. The pain was about the navel, and there was much tympanitis. The tissues over the hernial swelling were inflamed and œdematous, and the skin red. A vertical incision was made which gave vent to some gas and thick pus which came from a hole into a hernia sac. The walls of the sac were thin and were divided crucially so as to give free vent to all the pus in the sac. A considerable mass of omentum was exposed folded upon itself and covered with pus. It did not look much inflamed or present a bad colour. Could not discover any bowel in the sac, and, therefore, having given exit to the pus, the operator desisted, thinking it better not to interfere with the stricture lest the contents of the sac should find their way into the abdominal cavity. There was no appearance of fæces, or foul smell. The next morning she was easier. Abdomen more flaccid and not tender. Bowels acted after a glyster; a good deal of flocculent matter passing; some sickness with dry tongue, etc. In the afternoon she awoke from a short sleep with violent pain all over the abdomen. Opium was given, and the pain lessened, but the expression of countenance, small quick pulse, and tense abdomen made us suspect the escape of some fluid into the peritoneal cavity. She died on the morning of the 3rd. *Autopsy*.—Small intestines greatly distended, vascular, and covered with shreds of lymph, with some dirty turbid lympho-purulent fluid in pelvis. Behind omentum, at upper part of sac, was a shrunken, sloughed portion of bowel. The stricture was not very tight, but beneath it was a large hole into the bowel caused by its pressure, and, no doubt, a small quantity of fluid had escaped through this hole into the peritoneal cavity and excited the sudden pain and fatal prostration. The strangulated and sloughed portion consisted of nearly the whole calibre of the small intestine. As no bowel could be discovered at the operation (it was done by candle-light) it was thought at the time that it might have been returned."

Case of Death after the Taxis had been effected without Operation.

The following case, in which no operation was performed, is worthy of brief notice. We give the report as sent to us:—"A man, aged 78: strangulated femoral hernia. Rupture down four days before admission. He was very depressed and had stercoraceous vomiting. Chloroform was given, and reduction accomplished by the taxis alone. No abatement of the symptoms followed, and death took place in twenty-six hours. *Autopsy*.—The sac contained a shred of omentum and some lymph. A small knuckle was found tightly constricted, and with a perforation in it of a quarter of an inch in length. There were adhesions and yellow lymph between the coils of intestine. The sac was greatly thickened and adherent to the tissues around. Above the stricture the intestines were distended greatly, but below they were collapsed."

THE HULL HOSPITAL.

ANEURISM OF THE FEMORAL ARTERY — LIGATURE OF THE EXTERNAL ILIAC — SUPPURATION OF THE SAC, AND DEATH TWO MONTHS AFTERWARDS.

(Under the care of Dr KING.)
[Reported by Mr. Evans, House-Surgeon.]

John R., aged 42, a sallow, unhealthy-looking man, but who said that he had always been strong, was admitted on November 5, for an aneurism of the superficial femoral artery. He was by trade an auctioneer's assistant and warehouseman, and was accustomed to carry and lift heavy weights occasionally. He first noticed, five weeks before admission, a swelling at the upper part and inner side of the right thigh, of the size of a small walnut. He had felt a numb, aching pain in the part a few days before, which led him to examine his thigh. He thought it was rheumatism; took some physic, and continued his work. Three weeks afterwards he was obliged to discontinue his work on account of increased pain in the tumour, which had not, however, increased in size. He rested himself at home, and applied three leeches to the tumour, of his own accord. He had now a pricking pain, and numbness in the leg down to the ankle, and his leg began to swell. About a week afterwards he put himself under the care of a Surgeon. The tumour began to increase rapidly in size; the swelling and œdema of the leg also increased, and the knee became fixed and stiff.

On admission there was a swelling in the course of the right superficial femoral artery, of a size to fill the palm of the hand. Pulsation in it distinct, but not strong, and a faint bruit was audible. The tumour reaches up to Poupart's ligament. There was swelling and œdema of the extremity below the tumour, especially of the leg, and the knee was flexed at a right angle; any attempt to extend it giving him great pain. He complains of numbness in the leg, but had not much pain in the tumour. Pulsation in the main vessels of the limb was extremely feeble; it was weak also upon the sound side.

November 6.—The operation of ligature of the external iliac artery was performed. An incision was made in the course of the vessel, according to Abernethy's plan. The man took chloroform very badly. The vessel was tied with a silver wire ligature. Pulsation below was completely stopped, and the wound was closed with iron wire sutures. The limb was then enveloped in cotton wool. An opiate at bed-time. There was no pulsation in the aneurism; limb warm.

8th.—Takes a sedative every night. Whenever he goes to sleep the limb starts and wakes him again. Pulse 100. There is a soft, fluctuating feeling over the centre of the

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aneurismal tumour, as if the sac were suppurating. Cinchona mixture, wine.

10th.—Discharge of pus from part of wound, the rest healed. There was some pain in the calf, where there was some redness and tenderness. A lotion of lead and opium was applied to the leg.

12th.—The great toe was of a livid colour, but the lividity did not extend beyond it.

17th.—Wound discharging healthy pus. All œdema of the limb had subsided. The gangrene was quite confined to the great toe, and was apparently only superficial. The temperature of the limb was pretty natural. An opiate at bedtime.

26th.—The aneurismal sac had become gradually softer, as if suppuration had taken place in it. Nearer the groin was a small prominence, where pointing appeared about to take place.

December 1.—Whilst eating his breakfast, lying quietly in bed this morning, he felt a sudden pain and kind of jerk in the tumour, and on putting his hand to it he found it was swelling up under his hand. On being seen directly afterwards, the sac was found greatly distended and very tense, but with no pulsation or thrill. The tension gradually subsided, the tumour becoming softer during the day, so that nothing was done to it.

8th.—The sac remained soft and fluctuating, though somewhat larger than before its sudden distension. His appetite was very indifferent, and he had become a good deal emaciated. A linseed-meal poultice was applied to the part.

12th.—The ligature came away to-day with a little traction, it being thirty-six days from the date of the operation.

20th.—A free incision was made at the upper part of the thigh, close to the groin, giving vent to a large quantity of almost black and very fetid matter—evidently decomposed blood and pus. His knee had gradually become so contracted that the leg was laid almost parallel with the thigh, the heel approaching the nates. On the inner side of the knee a rather livid patch had appeared.

24th.—A large quantity of dark, fetid matter was discharged from the thigh daily, and the drain was evidently telling upon him. He was greatly emaciated, and had quite lost all appetite. He was kept up by a free allowance of wine and brandy, beef-tea, quinine, etc.

January 5.—He was getting rapidly weaker: perspirations frequent; the dark fetid discharge continued copious; aphthæ on tongue and inside of cheeks.

He died on January 9, two months from the date of the operation, and nearly one month after the coming away of the ligature.

Permission was only obtained to examine the seat of the aneurism.

Autopsy, same Day.—The sac of the abscess was smaller than was expected, considering the large amount of matter it discharged. The aneurismal sac was not to be recognised, its place being occupied by the sac of an abscess. A portion of the vessel above and below was removed for subsequent more careful examination. Immediately above the seat of ligature the vessel contained a well-formed, conical clot, an inch in length. Below the seat of ligature the remains of the vessel could be but indistinctly traced for about two inches, when all appearance of it was lost. For the space of four or five inches, occupied by the seat of the abscess and disorganised tissue, all traces of the vessel were entirely lost. About the middle of the thigh it became again visible, and continued downwards in its natural course. At the lower part of the thigh the vessel contained fluid blood, but above, for a distance of three inches or so, it contained a small thready clot, not filling the tube. The coats of the vessel here were diseased, presenting numerous yellowish spots (atheromatous degeneration). The vessel terminated above at the seat of the abscess in a tapering manner, the last inch or two being disorganised, and containing a puriform matter. The profunda likewise terminated abruptly at the seat of the abscess, but did not contain any clot. No trace of it near its origin was to be found.

THE JACKSONIAN PRIZE.—This Prize for the year 1860, for an Essay on "The Healthy and Morbid Anatomy of the Prostatic Gland" was awarded to Mr. Henry Thompson, at a meeting of the Council of the Royal College of Surgeons, on Tuesday evening last.

Medical Times and Gazette.

SATURDAY, APRIL 13.

MERELY AN APOTHECARY.

IT is well known that previously to 1815 every man in England did in Physic what was right in his own eyes. The College of Surgeons in London was ruled by a knot of "pure" Surgeons, who cared little for Medicine either as a science or an art; and the College of Physicians had degenerated into a snug club of Oxford and Cambridge Graduates, resident in London, whose great object was to snub their rivals, the "Scotch Doctors," and keep them in the inferior rank of Licentiates. The General Practitioners in England, the representatives of the Apothecary of the Elizabethan age, attempted to reform this state of things, and establish judges in the Medical Israel, as to Medicine at least. But they had so much more opposition than help from the College of Physicians that the Examining Board for the great body of Physicians to the people, which resulted from that movement for Medical reform, came to be appointed by the London Guild of Apothecaries.

This result stamped a name and character upon the whole body which were wholly undeserved, and which have had a most injurious influence upon the Profession in England. In particular, its trade character was continued by enacting that an apprenticeship to an Apothecary must constitute a portion of the education of the future Practitioner, and thus not only was the demand for apprenticeships kept up and even stimulated, and the old system of Pharmaceutical Medicine maintained, but the Practitioners could not escape the name and position of a trader in drugs, if he would obey the law of the land.

For half-a-century the Examining Board, so disadvantageously constituted from the first, has constantly advanced the professional education of the English General Practitioner; so that, at the present day, the average "Member of the College and Hall" is equal or superior to the average Scottish Graduate, even of Edinburgh, in general and professional attainments. There are hundreds of English "Apothecaries," indeed, who equal in all respects the average of English Physicians. But what is their professional and social position, whether at home or abroad? All men do gird at their incongruous designation. They have not the academic title which gives rank in the republic of letters. In Germany, they are confounded with the class of true Pharmaceutical Apothecaries; in France, with the lowest class of *officiers de santé*; while at home, any man with a more "genteel" handle to his name thinks himself entitled to assume an air of superiority over the skilled and well-educated Physician who is "merely an Apothecary."

Doubtless much of this is due to the apathy of the great majority. Strong in their individual respectability, and the personal esteem in which they are held, they think they can afford to treat these small rebuffs with contempt. It is only in this way we can understand why so intelligent and educated a body as the General Practitioners of England have not united as one man in demanding from Parliament and the Colleges that Professional position and title which belong to them of right. But this apathy and disunion have led to disastrous results, especially since the passing of the Medical Act. Their peculiar position has been made the excuse for proceedings on the part of public bodies the least evil of which is that they promise to extract large sums of money from the pockets of General Practitioners to an extent not easily estimated. A striking illustration of this new nuisance is ready to our hand.

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The College of Physicians of Edinburgh is a small body, consisting mainly of highly respectable General Practitioners, resident, for the most part, in that city, who have happily escaped the title of Apothecaries by a fundamental rule that the Fellows should be Doctors of Medicine. A few weeks ago it presented to its thrice-elected President his *vera effigies*, as a token of the gratitude of the College for valuable services. We have already printed an extract from the speech of the President on this occasion, in which he explained the nature of those services. It appeared from this explanation that the Medical Bill having extended the validity of the *licence* of the College from the narrow and unfertile boundaries of Auld Reekie to the utmost limits of the British Empire, the Fellows (or some of them) were forthwith stirred by a philanthropic desire to give full force to its advantages, which hitherto had been so little esteemed that hardly a solitary Practitioner could be found to accept it. Looking round for a suitable field for the exercise of their benevolence, the College discovered that the great mass of English General Practitioners were suffering the deepest degradation. By a strange calamity, for more than half-a-century they had been "merely Apothecaries" — traders—in title, at least—and subject, therefore, to all those indignities which the connexion of the Profession with trade leads to. "Could nothing be done for these wretched men?" was the benevolent inquiry raised within the College walls by the sympathising President and his supporters. After a long and arduous discussion, and by a bare majority of one, a plan was adopted by the College. It was beneficently resolved to return by post to each applicant during the ensuing year who had one Medical title, whether Surgeon or Apothecary, and who, at the same time, was not so lost in character and reputation as not to be able to get two Medical brothers, somewhere or other, to certify to his decency of conduct, THE LICENCE OF THE COLLEGE for the small sum of £10. No examination was required—not even a *tête-à-tête* with the President.

Nor was this all, as we learn from the eloquent oration to which we refer. After fighting the battle of the destitute and degraded Apothecaries of England in the College, the President benevolently betook himself to the Treasury, and by his eloquent importunity got the Stamp-duty of £10 taken off all Medical licences, so that down-trodden merit, however poor, might not be afraid to apply for the Edinburgh licence on the ground of expense. Thus the way was opened for the English General Practitioner to high College honours, and none need for the future complain that he was "merely an Apothecary." It was true that, a few months after the promulgation of the scheme, an attempt was made in the Medical Council to stop this grant of licences without a sufficient examination, but the philanthropic President broke the force of the blow by moving and carrying an amendment to the effect, That a practical examination in Medicine should be considered sufficient. Benevolence had its reward. There was a rush of hundreds of English General Practitioners for the high and coveted honour, in the belief that they were all created "Doctors" by the licence. The College got its thousands in hard cash, the President his picture, the Secretary his hard-earned *honorarium*, the Council heartfelt satisfaction as Councillors, and solid fees as Examiners; and thus all were finally made happy, like the good characters of a novel. The sad peculiarity in this transaction is the undignified readiness with which the objects of this scheme fell into it. The mere sending for the licence was not so bad as going for it. But the candidate doubtless argued that a trip to Edinburgh is a pleasant thing, the examination, although "very severe," was known to be "purely practical," and if the license were thus made more costly, it must be considered by so much the more honourable to be "L.C.P.E. (by Exam.)" So the degraded "Apothecaries" still crowded to the College portals, and returned by the score, "Doctoring" one another (by title) in the railway-carriages so vigorously, that their fellow-passengers not in the secret were aghast at the multitude of "Medical men" about them, in the belief that there had been a frightful accident "somewhere on the line," and these happy "Doctors" were on their way from the scene of destruction.

The Edinburgh College has never fully made known to what extent its benevolent schemes for ameliorating the condition of the English General Practitioners have been successful, but we find the following statement in an official document, printed at the close of last year:—"Within the last year nearly one thousand candidates have received the licence of the Royal College of Physicians of Edinburgh, and of these upwards of three hundred and fifty were admitted after examination within a single fortnight" (a).

The President of the Edinburgh College met all objections, and with some show of reason, by a *Tu quoque* to the London College of Physicians. It is certainly incumbent on the latter to take the most vigorous steps on behalf of the English General Practitioner, inasmuch as it is wholly due to its conduct at a previous crisis of the Profession that the title of Apothecary was made compulsory on the man who wished to practise as a family Physician in England. Corporate bodies cannot shake off their responsibilities, and the consequences of this delinquency on the part of the College of Physicians fifty years ago hang heavily upon it now. But still this is no excuse for the Edinburgh College of Physicians. It has no authority whatever in England, and its interference with the English General Practitioner was wholly uncalled for. The London College may do and has done wrong; that is no reason why the Edinburgh College should follow its example to the filling of its own treasury, and the disturbance and discredit of the Profession in England.

In the meanwhile, other clouds darken the Medical horizon. The London College of Physicians, fifty years too late, now propose to give a licence in Medicine, like that of the Edinburgh College, and its scheme is to be opposed on Monday next in the Courts of Law by the Examining Board itself helped to create. This is a just retribution. What course this contest between Apothecaries' Hall and Physicians' Hall may take cannot easily be predicted. One thing, however, is quite certain. So long as it is a mere question of pecuniary interests between the two Examining Bodies, and not of regard to the dignity and position of the great body of English Practitioners, neither can expect any public sympathy, even if they escape contempt. It is particularly incumbent, therefore, on the College of Physicians to endeavour to go into Court with an atonement for past neglect. Such would be found in a wise and comprehensive plan for giving the Surgeon-Apothecary of England that Professional title and position which are his right. Under any circumstances, the admission of the English Apothecary to the licence of the College should be at the least possible cost of time and cash, and thus the venal conduct of the Edinburgh College reproved by the atoning liberality of its London sister.

THE WEEK.

THE Police Reports in the newspapers contain almost daily accounts of the seizure of diseased meat in various parts of the Metropolis; and yet the practice appears to be on the increase, and, as we have been informed by persons specially qualified to give an opinion, the quantity seized gives but a very inadequate idea of the quantity that eludes detection and is sold to the labouring classes. As we are informed, districts such as the City of London, where some regula

(a) In the Privy Council: Case for the Senatus Acad. of the Univer of Edinburgh, &c. p. 15.

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supervision is exercised, and Bermondsey, which is under the energetic rule of Dr. Challice, as Medical Officer of Health, although they consequently figure in the Police Reports, are much more free from the abomination than Camberwell, Rotherhithe, and other outlying suburban districts to the south and south-west of London. All over the country cattle are dying from the effects of inclement weather and insufficient food, and wherever the carrion can be sold for human food, the temptation is too great for the bucolic conscience to resist. The elaborate report of Dr. Headlam Greenhow throws doubt on the noxious quality of the flesh of animals dying of disease, but it is evident from the testimony of skilled witnesses that the diseases of which cattle are now dying produce not merely emaciation, converting sheep into "lanterns," (so called in the technical language of the markets, because a lighted candle would shine through their transparent intercostal spaces), but a positive sourness and unwholesome quality. Our informant, visiting a very clean slaughter-house, where there was abundance of good meat, noticed a peculiar dissecting-room smell, which proceeded from a tub filled with pork in a disgusting state, and partly black with ecchymosis. This was seized, and some healthy-looking pork, macerated in the same tub of water, was seized likewise, because impregnated with the putrid water, although the butcher remonstrated loudly. In the same district some veal was seized which was but a day or two old, and some mutton from a sheep which had been crushed to death in a railway-van. The femur was smashed and the meat black with extravasated blood. Some Welsh legs, dressed as lamb, with a little wool fastened round above the hoofs, were not seized, but left, in order that the honest ingenuity of the butcher in manufacturing "lamb" might meet with its reward from a discerning public. The practical questions that arise are these: First, the necessity of stricter supervision at railway termini and steam-packet wharves (we are told that fifty cattle in a state of disease were landed lately at Blackwall and slaughtered there for the London market); next, a more full and efficient superintendence of the great central markets; and a frequent visitation of local slaughter-houses and low butchers' shops by parochial sanitary inspectors; and, lastly, something like reasonable security that condemned meat shall be so destroyed as not to enter in any way into the composition of human food. At present, it is next to certain that some which is boiled down is made to contribute a grease which is used in the manufacture of butter; a little of it, too, is added to chicory in roasting, in order to give this counterfeit a richness and tone, both to touch and taste, and to contribute that oily sensation which coffee yields and chicory does not.

Mr. Hamilton, Surgeon to the Southern Hospital, Liverpool, makes a statement, which apparently confirms the doctrine held by our Liverpool Correspondent of the independent origin of typhus (that is, its origin *de novo*, not by contagion from a preceding case), and of its relationship to dysentery. He says, in a letter to the *Times*, that when thirty Egyptians were admitted into the Hospital,

"A few of them were suffering from affections of the chest, others from exposure to cold, and others (the only men that were seriously ill) from dysentery, the result of overcrowding, filth, and insufficient clothing. No case of fever had occurred during the voyage, neither were any of them suffering under it at the time of their admission; and, singular to state, they have all escaped the disease—true typhus fever,—which broke out amongst the other patients a few days after their admission, and of which they were doubtless the cause. They were in an indescribably filthy state when brought into the Hospital, and the delay which occurred in procuring the change of linen may have given time for the dissemination of the virus among the other patients."

It is to be hoped that we shall be favoured with some further details of this outbreak of exanthematic typhus from our Liverpool Correspondent. The case seems to furnish most important evidence as to the cause of this disease, and before the opportunity is lost it would be well to ascertain beyond doubt the following facts:—1. Whether really, as asserted, no single person among the Turkish crew had typhus, at the time when the disease was communicated to persons in Liverpool. 2. Whether the vessel during the voyage had had any cases of typhus fever, or whether any of the crew had had any communication with persons ill of that disease. 3. Whether it can be clearly made out that *all* the cases occurring at Liverpool among the inhabitants were really cases of exanthematic typhus. 4. Whether the disease seemed to be caused by emanations from the *clothes* or from the *persons* of the Turkish sailors who were dirty and sick, but who, it is stated, had not typhus. At present the occurrence is certainly most remarkable. No one can suppose that the Turks are insusceptible of exanthematic typhus; thousands died of it during the Crimean war. And yet we are required to believe that these sailors were living on board ship, in the midst of conditions so deadly as at once to cause a certain malignant disease in other persons, without being themselves affected. If this were the case, either the specific poison of typhus must have been carried in the ship without acting on persons who cannot be supposed to have been insusceptible, or it must have been suddenly generated at Liverpool in consequence of the existence there of some further condition (over and above those existent on board ship) which was necessary for its origin. We have, it would appear, a good opportunity now of determining the spontaneous origin of exanthematic typhus, a point long discussed and surmised, but never precisely and unequivocally settled; and the exact share taken by the febrile human body in the spread of the disease can perhaps also be fixed. This outbreak seems certainly strongly opposed to the opinions of those who look on the sick body as the *only* reproducing agency of the poison of exanthematic typhus, and yet, as far as can be seen, it favours the idea that the human body is one of the agencies, if, as we gather, persons were attacked on visiting Englishmen who had taken the disease from the Turks, but who were, of course, free from that personal uncleanliness which in the case of the Turks may be supposed to have been one of the agencies causing the fever. But it is probably yet too early to analyse the facts of this remarkable occurrence; it is only to be hoped that it will not slip by uninvestigated, but that our Liverpool Correspondent will be able to place before us precise evidence which may enable us to form a correct opinion as to the origin and mode of spread of this outbreak of exanthematic typhus. The last news we have of the ship is from the correspondent of the *Times*, who writes from Valetta, April 5, and says that the Egyptian frigate *Voyageur de la Mer*, had sailed for Alexandria, having on board the crew of the ship left at Liverpool for repairs. Thirteen of the crew had died, and the master, Captain Lawson, three engineers and other persons, all English, were suffering from typhus fever.

The debate at the Royal Medical and Chirurgical Society on Friday, resulted in an affirmation of the proposition, "That it would tend to the advancement of Medical science, were the Royal Medical and Chirurgical, the Pathological, the Epidemiological, and Obstetrical Societies united under one head, and these different branches of Medical science carried out in corresponding sections of one Society." Mr. Charles Hawkins and Dr. Meryon, who moved and seconded the resolution, pointed out forcibly the advantages of combination, and the expediency of creating something like an English Academy of Medicine which should be able to show

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the world, in an authoritative manner, what are the opinions of English Practitioners on any disputed point of treatment. They were followed by Dr. Lee, who opposed the amalgamation, but pointed out what he considered grave faults in the existing management of the Royal Medical and Chirurgical Society. Dr. Webster and Mr. Macilwain followed on the same side. Mr. Arnott, who was listened to with a feeling of what we may call the most affectionate respect, deprecated the innovation, partly because the institution of a Pathological *Section* had failed, whereas the Pathological *Society* had succeeded, and partly because of financial difficulties. Dr. Copland opposed the scheme, on the curious ground that it would rob the affiliated Societies of their funds. Dr. Barker, as a Fellow of the Pathological Society, and Dr. O'Connor, expressed dissent. Hitherto, all the speakers had opposed the movement. But now the tide was turned by Dr. Druitt, who urged the necessity of getting the support of some one Professional Society for those great movements in the cause of public health and morality, which at present are more indebted to statesmen, lawyers, and philanthropists, than to Medical men. Instead of leaving such matters to the Registrar-General, or the Epidemiological Society, or the "Social Science" Congress, they ought to be backed with the whole force of the Profession. Dr. Stewart followed in an eloquent speech; and although Dr. Tyler Smith deprecated the movement on the plea of difficulty of details, while he admitted the principle, it was evident that the feeling was in favour of the Amalgamation party, and a vote of 38 to 23 confirmed the question. Thus far, then, the principle is affirmed by a respectable majority. Now the work will begin. How to induce the minor potentates to submit to be *mediatised*, and to undergo that fate which the Italians have bowed to, and which we hope soon to see executed upon the petty German princes? The arrangement will be difficult; but not insuperably so. A large number of new Fellows will join the parent Society, so soon as they know that a subscription of three guineas entitles them to the present privileges of the *Medico-Chi.*, with the additional privilege of attending any branch which may suit their convenience. We would rather avoid the character which Johnson stigmatized as that of a "voluble solver of difficulties;" but think that the thing can be managed, that a large Central Society may be formed, with an entire preservation of the energy, influence, independence, and presidential and secretarial dignities and sub-dignities of the lesser Societies. These last will be the greatest obstacles.

The dinner of the Society for the Relief of Widows and Orphans of Medical Men in London and its Vicinity was held on Thursday week, under the presidency of Mr. Stone. It was extremely well attended, and the chairman was quite as successful as ever. We feel sure that if this Society were better known, the number of its members would be much larger. It was formed in the year 1788, to relieve those widows and orphans of its deceased members who might need assistance. "It unites the advantages of a Provident with those of a Benevolent Society. It is Provident, as by the small yearly subscription of two guineas the Members do, through it, protect their own families from destitution, should they unexpectedly need it; and it is Benevolent, as its benefits are conferred only on those who are left in straitened circumstances. The experience of seventy-two years has fully proved the need that existed for this Society, for 126 families, or 117 widows and 187 children, of Members of the Society have been placed in comfort by an aggregate sum of above £57,000, paid in half-yearly sums, besides apprentice fees. Many of these recipients were in a state of absolute poverty when the Society stepped in to rescue them. In the past year (1859-60) £1828 10s. was distributed among 38 widows and 26 orphans." It was urged at the dinner by Dr. Hamilton Roe, with very great force, that anyone who *knows* that by the payment of two guineas a-year he can secure for his widow £35 or £40 a-year, for his children £12 a-year, and for his orphans £25 a-year, is extremely foolish if he neglects such advantages. Putting higher motives aside, pure selfishness should lead every Medical man to join this Society.

Dr. Lionel Beale began on Monday evening, in the Theatre of the Royal College of Physicians, a course of Microscopical Demonstrations of the Structure of the Tissues of the Human Body, which promises to be extremely useful and attractive. After some remarks on the importance of practical research to the Physician, and not merely the importance, but the credit to be gained by enlarging the boundaries of matter of fact, he noticed the distinction between the physical and chemical properties of living tissues and the reactions which arise therefrom, on the one hand, and those qualities which are capable of propagation by hereditary transmission, or in popular language the vital, on the other. He uses the term "elementary part," to designate the smallest organic unit, which is commonly known by the word *cell*. He states that every elementary part consists of matter in two states; either *active* or *germinal* matter, which alone possesses vital force, and *formed passive* or material, which was once in the state of active matter, but is so no longer. The germinal matter is alike in all creation; and is a granular matter, usually recognised as *nucleus*, primordial utricle, etc. It is the growing, as distinguished from the grown matter, or the propagating, as distinct from that which is not propagating tissue; and it exhibits a power of combining with certain alkaline solutions of colouring matters, which is not possessed by the *formed* tissue. The microscopical preparations which were exhibited, showed nuclei delicately tinged with carmine, which would have been invisible without this mode of preparation. If we understood Professor Beale aright, the so-called connective tissue consists of capillaries and minute nerve-fibres, and empty fat-cells; and the so-called "areolar tissue corpuscles," are the nuclei attached to the capillaries and nerve-fibres. If this be true, it portends grief to the cellular pathology of Virchow. The portable microscopes, with lamp attached, which were passed round among the audience, excited great admiration; whilst the intensity of the magnifying powers to be employed, consisting of an $\frac{1}{25}$ inch object-glass with a magnifying power of 1700 diameters, showed that discovery has not yet attained its limits.

A subscription is now being raised in favour of the family of the late Dr. Wall, of Dunmanway. The following statement of the case has been forwarded to us:—

"Dr. Wall was the Medical Officer of the Dunmanway Union for five years. In January, 1859, a man was admitted with a broken leg. Dr. Wall did not consider it well at that stage to amputate the leg, but said it might be necessary afterwards; the patient and his friends said they would on no account submit to the operation. The man died a few days after. The Poor-law Commissioners instituted an inquiry, and, notwithstanding the above facts, 'advised' Dr. Wall to resign his office; he did so; the Guardians of the Union re-elected Dr. Wall; the Commissioners refused to sanction the election; the Guardians advertised for a Medical Officer, but none would apply; they advertised again at an increased salary, and then, without waiting for the election, the Commissioners sent down 'sealed orders' dismissing Dr. Wall. Dismissing under sealed orders renders a man incapable of ever again holding office under the Commissioners.

"These proceedings preyed so much on Dr. Wall, that his

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health gave way, and he died a few months after of a broken heart, at the age of 39, leaving his widow with an infant only three weeks old, and two other helpless children, totally destitute of any means of support.

"Dr. Purcell, the Poor-law Medical Inspector, and several of the leading Medical men of Dublin gave it as their opinion that Dr. Wall was right in not taking off the man's leg."

We trust that the power vested in the Poor-law Commissioners of dismissing Medical men under sealed orders will be at once brought before Parliament. The whole Profession should petition against a power which may be so grossly abused—a power which is unquestionably unconstitutional.

AMALGAMATION OF THE MEDICAL SOCIETIES.

A Special Meeting of the Royal Medical and Chirurgical Society was held on Friday, April 5, 1861, Dr. Babington, President, in the Chair.

The President said they were assembled on that occasion as a special meeting for the purpose of considering the question of the Amalgamation of the Pathological, the Obstetrical, and the Epidemiological Societies with the Medical and Chirurgical, in order to form one great united body. He had not the honour of being President of the Society when the matter was first mooted. He believed it originated with some of the members, who thought such a union would be desirable, and it had been since considered by the Councils of the several bodies concerned, some of whom had come to the conclusion that the proposed amalgamation would be for the benefit of Science. The different Societies had not pronounced any opinion on the matter, and the members were called together on that occasion for the purpose of expressing their views on the subject.

Dr. Sieveking then read the circular which had been issued to the members of the Society.

The President said the best plan would be to consider the first proposition, whether it would be for the advancement of Science generally, for the good of the Society, and of the public, that the amalgamation should take place; and, if it should be so determined, they could deliberate upon the best means of carrying out the proposal. If, however, the proposition was not acceded to, the whole question would fall to the ground.

Mr. Charles Hawkins said he felt he owed an apology to the Society for placing himself in the position he then occupied, and moving a resolution of so much importance, feeling as he did, that if the proposition he had to submit was not carried, the result would be due to the weakness of the advocate, and not to the resolution itself. At the last annual meeting he brought the subject before the Fellows, and the result was, that the Council thought it right to call the different Societies together to consult upon the subject, when the resolution was passed to which reference had been made. It had been for many years a subject of deep deliberation with him whether the Profession held that position in the country that was due to its weight and influence. When he first entered the Profession, the question of what was then called Medical Reform was prominently before it, and the younger members looked forward to the termination of the question as an event that would solve all their difficulties. In the formation of the Medical Council many persons hoped to find a solution of the question; but it had become evident, that however useful that body might be to transact the business coming before it, it was not a body at all adequate to represent the Profession to the public. (Hear, hear.) With regard to the different corporate bodies, they had their own distinct interest to represent, which he had no hesitation in saying they represented well; but it had been very lately proved that even the College of Physicians and the College of Surgeons could not unite upon one subject of great importance to the Profession. It was necessary, therefore, to look to another body that should be able to put before the public at large the united opinions of the Profession; he meant only in a scientific point of view; for if they were ever to have the influence with the country and the Government which they deserved, it would be simply in their character as men of science. (Hear, hear.) Their Profession was purely one of science, and utterly devoid of political power. The question that had occupied their attention so long was, how best to achieve the desired object. There were many questions of vital importance coming under the cognizance of the public and the Government, from day to day; and to whom were they to refer for the solution of their difficulties? Up to the present time there had been no fair representative body to which the Government or the public could look. (Hear, hear.) In many questions that came before the Home Secretary, or other acting Minister, very much must depend upon what private information he might receive from individuals, or, in many cases, from his own Medical attendant. Everyone who had watched the progress of the country of late years, must have seen the evil results of such a state of things; and the public had, no doubt, a very fair answer to make,—"We do not know whom to go to. The Colleges are not representative bodies; they have their own business to carry on, and we cannot get from them what we really want in the simplest cases." With regard to the simplest questions of difference of opinion in practice, that arose from time to time, and questions of legal Medical evidence, the present state of things must be regretted by every Medical man. There was scarcely any trial before the public where Medical evidence was a principal part, in which they had anything to congratulate themselves upon as to their unanimity. Then, as to the different modes of practice adopted by the Profession,—he desired to give to the public every possible right to have themselves treated in any way that they thought would best conduce to their own health or minister to their own whims. But he thought the public ought to have placed before it the results of the deliberations of the Profession, after careful investigation, as to the real strength of any practice or any principles that might be occupying attention. At present they could not blame the large number of persons who ran after every kind of wild theory, because it was not to be disguised that there was no theory that had been put before the public that had not been counteranced by some members of the Profession. If they did not hold the position in the State to which they were entitled as a scientific and educated body, it was their own fault. They had not asserted that right in the world of science which they might reasonably claim. They had not gone boldly before the public with reference to any one point and openly stated, "We have considered the subject, given it our best attention, tested it in all ways, and we now give you the result." Many years ago, the Society was established for the promotion of Physic and Surgery and the collateral sciences,—and had the Society carried out that charter? He thought not. (Hear, hear.) If they had done so they would not have seen other Societies brought into existence and successfully taking up branches of Medicine which they themselves had allowed to drop. Was it to be expected that they should be considered as a representative body of the Profession when they allowed distinct Societies to take up subjects which, unless they were brought together to one point, were of comparatively little use in the study of disease? The only mode in which they could expect to have any influence with the public would be to form a Society in which every branch of the Profession would be represented. Surely there could be no use in studying any particular branch of Medicine except for the purpose of bringing it to bear upon practice. They might study Pathology to the end of time, and it might be of itself a very interesting science, but if it was not brought to bear upon every-day Medical practice it was a study from which the Profession would gain very little benefit. So with regard to the study of Materia Medica, it would be of comparatively little use if it was not brought to bear upon the practical treatment of the patient. The question now at issue was, whether Science would be improved by all these different branches being brought together. To their own Profession such a union would be very advantageous. At present certain papers were read before the Society of which the members had very little notice; the discussion was confined to those who might happen to be present, and who perhaps were little prepared to discuss them. The papers then went before the Council, and on the first page of the *Transactions* it was stated that the Society did not pledge itself to any of the opinions expressed by the authors. Neither the public nor the Profession had any means of ascertaining the opinion of the Society upon the different points brought

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before it. If that was the case with their own Society, it must be so in a great measure with the others. Especially was it the case with the study of Pathology, for unless all the preparations and reports were grouped together for the benefit of the Practitioner, he did not see how they could arrive at any greater improvement ten years hence than they had seen during the last ten years of the existence of the Pathological Society. There was one point connected with the scheme that he considered of great importance, namely, that the Secretaries of each section should, at the end of the year, prepare a report to be brought up and discussed by the members. At present they had no means of "striking a balance," and showing the public from year to year the progress the Society had made in the improvement of Medicine. Last year he was in consultation with one of the most illustrious Professors abroad, who told him that though he read all the English journals, and ascertained the individual opinions of many members of the Profession, he had no means of arriving at any conclusions adopted by the Profession at large. In France it was otherwise: the different subjects were discussed before the Academy, and the opinion of the Profession was thus elicited. There was no doubt that Medical men could combine if they felt so disposed, and that with great unanimity. It was quite possible—to use a fashionable term—to have a Medical "unification." This was abundantly proved by the prompt and unanimous expression of opinion on the part of Medical men in reference to Special Hospitals. There was no body of men to apply to; the matter simply fell into the hands of a few people who got up a Committee, and took the trouble to write to the members of the Profession and ask their opinions, and the result showed that the Profession could be unanimous, and were ready to give their opinion when a proper channel was provided for its expression. He had no doubt as to the results that would be obtained by the adoption of the proposed scheme. All the branches would be benefited, and the parent Society would be strengthened. The scheme, of course, could be modified in any way that might be thought desirable. There was only one thing to which the Council would feel themselves bound, and that was to establish a section for each Society that was brought in. With regard to the question of the power to admit the different Societies, they had heard the opinion expressed by the Solicitor. For himself, he saw no difficulty in the way of applying for a supplemental charter to give them the requisite power. He would not trouble them upon the question of finance, as it was of very little importance as compared with the question of amalgamation. He could not believe that the pecuniary interests of the Society would be injuriously affected, as there would be now a large increase in the number of members. People were now beginning to ask whether it was worth while to give three guineas a-year to the existing Society; but if the proposed alteration were made, he had no doubt they would get as large a Society as ever existed in this country or any other. (Hear, hear.) Many questions were now gradually going away from them that ought certainly to be brought under their consideration. The Social Science Association, for instance, had been recently discussing the question of Quarantine, which was especially a subject for the investigation and discussion of Medical men. He attended on Committees of different Societies in relation to subjects of more or less interest to Medical men, and could not help feeling that the Medical and Chirurgical Society was very much behindhand in allowing laymen to take up questions of that description. He begged to move:—"That it is the opinion of this meeting that it would tend to the advancement of Medical science were the Royal Medical and Chirurgical, the Pathological, the Epidemiological, and the Obstetrical Societies united under one head, and these different branches of Medical Science carried out in corresponding sections of one Society."

Dr. Meryon said he agreed with every word uttered by Mr. Hawkins, and had great pleasure in seconding the motion. Mr. Hawkins had mooted several questions of great importance for the consideration of the Society, and not the least important was that which referred to the information conveyed to the Continent relative to the opinion of the Profession in this country, and which could only be collected from some united body, like the Academy in Paris. The difficulty was not only felt on the Continent but in the provinces, where the greatest desire was often expressed to know the opinion of Practitioners in the metropolis. There was another question of considerable importance both to London and country Practitioners, connected with the various systems which were in operation. At present the Medical man was often asked questions by his patients which it was almost degrading for him to answer; but if they had the means of reading such a journal as would no doubt emanate from the combined Society, they would arrive at sounder conclusions, and be in a more proper state of mind with regard to the condition of Medical Science. Then as to the papers, which Mr. Hawkins had perhaps undervalued,—which he believed to be second to none ever published in this or any other country—if those papers were carefully considered before they were printed in the *Transacti ns* of the combined Society they would form volumes that would be of the highest value not only to their own countrymen but to foreigners who were most anxious to ascertain what progress the Profession was making in England. The pecuniary consideration was quite a secondary matter—("No, no");—but he believed they would gain instead of losing. He had himself been requested by eight or nine gentlemen to propose them as members of the new Society if the amalgamation were carried out. (Hear, hear.) There was a matter last year under the consideration of the Council of which he supposed he was at liberty to speak. It was a scheme in anticipation of the proposed amalgamation, and had reference to a more central and convenient place of meeting at Burlington House. If that object could be attained, the Society would be brought into closer connexion with the Government, who would no doubt be glad to have such a body to communicate with in reference to questions with which they were often at a loss to deal. They had obtained the sanction of two bodies out of three of those who had a voice in Burlington House, and he supposed there would be no difficulty in procuring the sanction of the third. He had reason to believe that they would be accommodated there if they required it; and the result would be the acquisition of additional *prestige* to the Society as a national institution.

Dr. Robert Lee said he was one of the oldest members of the Society, and perhaps the largest contributor to its *Transactions*. He had considered the matter seriously, and was sorry to differ from Mr. Hawkins, whom he sincerely respected. His proposal was not calculated to render any assistance in the prosecution of Science. He (Dr. Lee) wished to see the Society preserved intact. No doubt it could be improved, and he should be glad to see improvements introduced; but he did not see how the different societies to which reference had been made could satisfactorily work together. He believed such an amalgamation would be the ruin of the Society. (Hear, hear.) There were many things no doubt which were justly the cause of complaint. Papers, for instance, had been rejected which never ought to have been rejected; and men had been placed upon the Council who had no right there. No man ought to be a a member of the Council who had not acquired distinction in some department of Science. Every endeavour should be made to get the best papers; individuals should be set to work, and not discouraged and their labours overlooked. That was the way in which the Society might be improved. As to the Medical Council, what had come of it? Nothing but confusion. It had thrown the whole Profession into disorder. And was it likely that any better result would ensue from combining so many heterogeneous materials together? What had they to do with the Obstetrical Society? He did not approve of their proceedings, and should not like to be amalgamated with them. There were doctrines mooted there which he should be sorry to have any connexion with. He wished to raise his voice against the proposed amalgamation, which he hoped would never be carried into effect.

Mr. Macilwain said he had the misfortune to differ both from Dr. Lee and Mr. Hawkins. The latter gentleman had pointed out with admirable perspicuity a large number of the symptoms; but he could not agree with him in regard to the remedy to be adopted. He was not disposed to defend the *laches* of the Society. He had, when it was very unpopular to do so, written, first under a *nom de guerre*, and then under his own name, an account of the defects of the Society, on most of which Mr. Hawkins had touched. The question was, how those defects could best be remedied? His opinion was that self-reliance was the best mode; and when he

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remembered the names of the men who had enrolled themselves in their ranks, he could not conceive of any Medical question that could not be investigated by them under the most auspicious circumstances, and with the greatest probability of success. The Society was constituted for the cultivation of Medical and Surgical Science, and the collateral branches. Had they done that? Had they answered the questions which the public had a right to ask them? Had they not rather seen questions which might be determined by a careful induction of facts, left to conjecture? and had they not seen Homœopaths, Hydropaths, and all sorts of sects, rise up and live upon the doubts and conjectures of the public, which they had not in the smallest degree attempted to enlighten? Then, with regard to the papers; he did not wish to re-open old questions, but would rather let bygones be bygones. He would only say, that it was of great importance that nothing should be admitted into the *Transactions* until it had received the *fiat* of the Profession. If there was anything as to which a doubt existed, let it be kept awhile in abeyance, until the Profession had had time to collect opinions upon it. When the Epidemiological Society was first started, he said, "That is what you ought to have done." The question of epidemics was one of the greatest interest to the Medical man and to the public at large; and there were many other subjects of an equally interesting nature that the Society was perfectly competent to take up, without resorting to the cumbrous method of inviting other bodies to coalesce with it, which was a practical reproach upon its own *laches*. Let them look at the list of their own members, and let them take any question connected with Medical science, and he believed he could point out four or five gentlemen who were as competent as any members of the Profession to investigate it; and investigating it under the commission, as it were, of a learned Society, they would have every facility afforded them to obtain the information they required. Unless they determined that they had no power in their own body, he could not see the object, scientifically, of amalgamating with other Societies. He desired to speak cautiously upon the subject, because he felt sure that Mr. Hawkins would not bring any question before the Society that he had not well canvassed in his own mind; and he would not venture to move an amendment. It did, however, appear to him, that before inviting the coalition of other Societies, they were bound to see whether they had not material in themselves for carrying out whatever scientific questions it might be necessary to investigate. Their best plan, as it appeared to him, would be to mend their own ways. He did not desire to see the force of the Society weakened, and he might add, without affectation, that he was jealous of its honour. (Hear, hear.)

Mr. Arnott said that on receiving the circular convening the meeting, it appeared to him that the question brought before the members was an exceedingly important one, involving the very existence of the Society. The question at present under consideration was simply one whether the proposed amalgamation would tend to the advancement of Medical Science. There was another question, however, that appeared to have been shirked—namely, the financial question; and, as he was a trustee, that was, to him, of course, a matter of some interest. If Dr. Meryon had had more experience in the working of the Society, he would not call that question a "secondary" one. When he (Mr. Arnott) became Treasurer, in 1835, the Society had, in the two previous years, dwindled down from 158 Fellows to 123; and the whole amount that he received from his predecessor in office was £5 10s. (Laughter.) Anything that tended to diminish the funds of the Society was calculated to put it in the greatest jeopardy. In referring to that circumstance, he desired to do justice to a man whose absence they all regretted—one who had taken the most active interest in restoring the Society to its former *prestige*—namely, Dr. Elliotson. (Hear, hear.) To him and to other well-known members of the Profession they were indebted for the restoration of the Society. It ought to be remembered that the Government Charter did not found the Society. It dated back as far as 1805, and had published some very valuable *Transactions* before the Charter was granted; and he believed that the founders and promoters of the Society did every justice and credit to the subjects brought before them. In the progress of Science there were always new subjects rising up of more or less importance, and it was impossible for any Society to embrace them all. From the time of Charles II. to the beginning of the present century the Royal Society embraced all natural science. But could any man now say that geological science, mineralogical science, natural history, botany, and geography, would have advanced as they had done if they had remained connected with the Royal Society? Reference had been made to the Academy of Medicine at Paris; but, had they never heard of the Surgical Society and the Pathological Society in Paris? Those Societies did not belong to the Academy of Medicine, but stood upon an independent footing. It had been said that the fault lay in their own Society, and that they could have taken up the various subjects in question. He denied that statement, and maintained that the subjects could not have been carried out so well, but for the steps that had been taken by the men who were particularly interested in them. With regard to the Pathological Society, it was well known that when the meetings were first held they were looked at askance by the various Hospitals instead of receiving support from that quarter. The meetings, however, were persevered in, and the result had been very satisfactory. He did not believe that the Pathological Society would have done one-tenth of the work it had achieved if it had not had a separate constitution, which has led a larger number of men to devote their energies to the investigation of the subject than would have come forward if the subject had been merely taken up in connexion with the Medical and Chirurgical Society. Various complaints had been made against the Council for the rejection of papers and other matters, but the fault, if any, lay with the Fellows themselves who elected the Council. If they elected secretaries, who only held office for two or three years, they could not expect their work to be well done. It was not necessary to go into the question of how the Society might be improved, but there was no doubt there was ample power of doing it if the Fellows chose to take the subject into consideration.

Dr. Copland said he was sorry to say that it was thirty-nine years since he was admitted a member of the Society, and he held the office of President at a stormy period when a large number of members attacked himself and the Council, but he believed they were now sorry for what they had said. Very sanguine views had been expressed as to the elevated position the Society would occupy if the proposed amalgamation were effected, but he believed the expectation would not be fulfilled, although their own Society might possibly be benefited by the amalgamation, the other Societies would certainly be injured. Very few persons would become members of the Pathological or Epidemiological Societies if they could obtain all the advantages of such membership by being elected members of a joint Society. The disadvantage to the smaller Societies would be certain, while the benefit to their own Society was only problematical. He begged, therefore, to move a direct negative to the proposition which had been submitted by Mr. Hawkins.

Dr. Webster expressed his concurrence in the sentiments of Dr. Copland. He believed the scheme, if carried into effect, would exercise an injurious influence upon the Society. It appeared to him that the financial question had not been sufficiently attended to. He found that out of the 331 Resident Fellows of the Society, a very large proportion belonged to the other Societies, one-half belonging to the Pathological Society. Moreover their own President was also President of the Epidemiological Society. Dr. Smith was President of the Obstetrical Society, and Dr. Copland of the Pathological Society. They had the best men already among them, and it was not likely there would be any considerable accession of members.

The President suggested that it would be advisable to confine the discussion of the question to its scientific bearing.

Dr. Webster was of opinion that science would be better promoted by separate Societies than by an amalgamation, since a division of labour was as beneficial in science as in commerce. As allusion had been made to the Profession in Paris; it should be remembered that there were twenty-seven Medical Societies in that city, independently of the Academy. (Hear, hear.)

Mr. Acton said he thought sufficient evidence had been laid before them to show that the Society had not been conducted in a proper manner, and that it did not represent the Profession at large. It appeared to him an extraordinary

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supposition that a Society could be properly regulated where there were seven Presidents and Councils. Such an idea, he supposed, was never before suggested, except in connexion with the Social Science Association—an erratic body, all the sections of which assembled at the same time. Was it possible to suppose that there could be unanimity where there were seven Secretaries and seven Presidents? He should be glad to see the Society raised to the point of elevation desired by Mr. Hawkins, but he did not see any means by which the amalgamation could effect that object. If the Society was to be improved it must be improved by itself, and he saw no reason why the propositions which had been made by members could not be carried out by themselves. The Council might divide itself into sections, and when any question of importance was brought before it it might be referred to a particular section, a Chairman and Secretary being elected for the time being. The section would then report to the general body, and questions would be discussed freely as in other Societies. It was an unfortunate thing that the Senior Members did not attend the meetings of the Society. The Senior Members in Paris regularly attended the Academy of Medicine and gave their brethren the benefit of their opinions. But it was deplorable to find that in London the discussions were almost confined to the Junior Members. Mr. Hawkins was more than justified in having brought the question before the Society, and deserved the thanks of the Profession for the manner in which he had taken up the subject.

Dr. O'Connor thought the Society was very much indebted to Mr. Hawkins for bringing the subject before the members. He had no doubt as to the power of the Council to carry out the different objects to which reference had been made, for the Charter was expressly granted "for the promotion of Physic and Surgery and the branches of Science connected with them." He agreed with Mr. Hawkins in thinking that neither the Medical Council nor the Colleges represented the Profession, and that some proper focus was needed where Medical men could assemble and fitly represent the general body. There could be no question that the boundaries of the Society ought to be extended, but he did not agree with Mr. Hawkins as to the means by which that result was to be obtained. There was no need to consult other Societies, for the power rested with themselves to form the different sections required by the members. He was surprised that among the efforts made to swallow up the other Societies, the Pharmaceutical Society had not been included, so as to complete the monopoly. Next in importance to the subject of Pathology was the use of remedial agents, yet no section was proposed for Materia Medica and Therapeutics. The Medical and Chirurgical Society as it at present existed had unquestionably many faults. Many discussions had taken place that would not have been tolerated but for a certain agency and power. And he considered it a great reproach that the son of one of the founders of the Society, who was then present, and who had been a Fellow for twenty-seven or twenty-eight years, had never yet been placed on the Council.

Dr. Druitt said he was greatly impressed with the advantage of Mr. Hawkins's proposal, and he thought the arguments that had been used against it were especially calculated to show its real value. It would be a great advantage to young members particularly if they could join a Society that included all the branches of Medical science, without being required to pay large subscriptions. At the same time it was important that the finances of the Society should not suffer; and such a result, he thought, would be prevented by the large increase of members that would follow the adoption of Mr. Hawkins's resolution. He was at a loss to understand how the shortcomings of the Society should be alleged as an excuse for not adopting the proposed measure. It was said that they wanted sections; but here were sections already formed, sections that ought never to have been established apart from the Society, and that were now ready to come into the parent stock. There were other subjects also that might be advantageously taken up. At present the public were becoming aware that the most popular subjects with Medical Societies, were those which were most likely to bring in a ready money return to the propounders. But there were on the borders of Medicine a large number of subjects, at present in a nebular state, closely connected with the interests of humanity—questions of social science,—which could scarcely be said to be remunerative to those who engaged in them, but the consideration of which, in a Society like that, could not fail to be advantageous both to the public and the Profession. It was an extraordinary thing that while the treatment of disease was pursued with the greatest acuteness its prevention should be so much neglected; that, while Hospitals were established for special diseases, conditions which brought about those diseases met with no remonstrance on the part of the Profession. He begged the members not to decide hastily against the proposed amalgamation, since it was admitted that the various sections were wanted, and that such sections were ready to come in; that a large number of younger members were prepared to join a Society in which every branch of the Profession was represented, and that the pecuniary interests of the Society would not be injuriously affected.

Dr. Stewart said, when the subject was first brought forward by Mr. Hawkins, he expressed himself favourably to the proposal, and the fourteen months that had elapsed since that time had only added strength to his convictions. There was a wide-spread feeling that at a period when the avocations of Medical men were so onerous, it was most undesirable that, instead of concentrating, they should be diffusing more and more the opportunities of acquiring and imparting information, and working for the advancement of science, that instead of joining the different bodies together, they should be permitting a larger number of Societies to be established, and so preventing the attendance of those members whom they most desired to see at the meetings of the parent Society. Eight years ago, when it was proposed to enlarge the place of meeting, he begged that for the sake of Science and of the Junior Members, the Senior Fellows of the Society would more frequently attend and give them the benefit of their matured opinions; but he feared that the attendance of the heads of the Profession had been less during the last ten years than it had ever been before. If the different Societies were concentrated the result, he believed, would be different. Hitherto the Society had plumed itself on not giving any collective opinion on the subjects brought before it, and it was expressly stated that the Society was not responsible for the sentiments contained in the *Transactions*. In one respect that was quite right, but it was not the way in which scientific questions should be conducted. There being no authoritative and collective opinion expressed, it was no wonder that foreigners complained that they were unable to ascertain the opinion of the Profession generally in England. By the concentration of the Societies, and the appointment of committees of investigation on different subjects, this evil would be to a great extent remedied, and a great benefit would be conferred on Medical Science. They gained nothing by the multiplication of Societies. No doubt the tendency of the other Societies would be to sink, the Members gradually dropping off and joining the main Society, and in that way the desired object would be attained. But why should they not form one great united body at once, which should do justice to the science of Medicine and to cognate subjects? If they continued to shut themselves up in their own exclusiveness, and if the Senior Members did not attend at their meetings, the Society need not indulge the pleasant idea that it would go down to posterity in its original greatness; but if they were true to themselves they would increase alike their numbers and their fame. (Cheers.)

Dr. Tyler Smith thought a word should be said on behalf of the Societies that were supposed to be willing to be brought in under the scheme of Mr. Hawkins. He could not help thinking that the discussion had been somewhat premature. From the fact of the adoption of the resolution by the deputations of the different Societies, it had been erroneously inferred that the subject had been considered by the Societies themselves. As far, at any rate, as the Obstetrical Society was concerned, the matter had not been considered by the Council, and no vote had been taken upon it. Before such a scheme was adopted by one Society it ought to be considered by the Councils of the various Societies, so that they might be sure of their approval. If the resolution was passed by the Medical and Chirurgical Society it might be received adversely by the other bodies. He was not opposed to the union of the different Societies, but he objected to the simple merging of the other bodies into the Medical and Chirurgical Society under its present name, which certainly did not typify or represent the department of the Profession to which he

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was devoted. If the Society adopted a new organisation, and a union was proposed which should be a development and growth of the present state of things, he thought there would be no objection to such an arrangement. In that way the present Societies would still preserve their individuality, administer their own funds, and so maintain that life and energy which he believed would be lost by the proposed scheme.

Dr. Barker said the subject had not been taken into consideration by the Council of the Pathological Society, and the only allusions he had heard made to the subject had been in the way of ridicule, apparently indicating that the proposal was not likely to be seriously entertained.

Mr. Charles Hawkins said, there was scarcely anything to reply to in the observations that had been made by the members. He thought the Medical and Chirurgical Society should determine whether it would admit the other bodies before the subject was taken up by them, as they would, in considering it, naturally desire to know whether the Medical and Chirurgical would open its doors to them. With regard to the observations of the Senior Members, whom no one respected more than himself, he might observe that there was no alteration that had not been opposed by senior Fellows; and the Society itself, it would be remembered, was strongly objected to by the College of Physicians, some of the members of which thought it would destroy their position as a scientific body. The present question was one solely of principle, the details of which could be afterwards arranged. The financial question was as simple as that two and two made four. If they had more members they would have more money, and that such a result would be obtained he had not the slightest doubt. Many persons had said to him, "When you have such a Society as will represent the Profession we will enter it, but we decline to give three guineas a-year to the Medical and Chirurgical Society as it is at present constituted." His own opinion was, that the Society was empowered to carry out the whole scheme; but in carrying out every change there must be compromises, and it would, no doubt, be an advantage to include in the scheme the various large Societies referred to. Those Societies contained, to a large extent, the same members, and often chose the same persons as Presidents; and they met in the rooms of the Medical and Chirurgical Society, on different days, to carry out the same thing, and in the same way as would be done if all the Societies were amalgamated into one. The question was only one of time; for he felt satisfied that, sooner or later, the object would be accomplished, however it might be opposed at its first introduction. (Cheers.)

The motion was then put from the chair, and was adopted by a majority of 38 against 23.

The further consideration of the subject was then adjourned to a future meeting.

REVIEWS.

Diphtheria: its Symptoms and Treatment. By William Jenner, M.D., Special Professor of Clinical Medicine in University College, etc. 8vo. Pp. 107. London: 1861.

It is quite refreshing to read a book like this, where the Author briefly details the results of his own experience for the benefit of his pupils, being himself clear-headed enough to seize the salient points of his subject, and sufficiently practised in the art of teaching (no extensively diffused art, by the way) to resist the temptation of an elaborate display of his erudition. Dr. Jenner is quite a man of this stamp; when engaged in imparting instruction there is no mistaking the singleness of his object, and there are few men who exhibit more tact in attaining it, who address themselves with more effect to the student-mind, and this simply because he has made himself master of its wants and its inlets.

"The Lectures are dogmatical in tone because they were addressed to students; and I believe dogmatism to be essential to successful student-teaching. I endeavoured to make them practical in regard of diagnosis and treatment, because they were addressed to a clinical class. The details of the cases are few, partly because the majority of the patients were seen in private, and partly because I have found that students are more confused than instructed when copious details of a case are placed before them."—*Preface.* Dr. Jenner is right.

Well, this is a little book, but it contains a vast deal of information, just the sort of information about diphtheria that the student would ask for, and just the sort also that the hard-worked Practitioner needs, who would far rather sit by the fireside with an experienced Physician for an hour's conversation, than wade through five hundred printed pages for the sake of the material to be gathered from half-a-dozen of them. And he would learn more, too. He would probably ask what he thought about the relation of the exudation to vegetable growths, and Dr. Jenner would tell him that he was satisfied that epiphytes played no essential or important part in the cases of diphtheria that he had seen, for he was sure they were not present in several cases which he had carefully examined. He would be told, too, not only that the disease might commence in the larynx and spread to the pharynx, but would be told also of a case where there had been no continuity between the two exudations, but that each might occur independently of the other. With regard to the origin of the disease, he would hear cases narrated which strongly impressed on Dr. Jenner's mind,

"First. That the disease is infectious.

"Second. That the infectious element does not require for its development any of the ordinarily considered anti-hygienic conditions.

"Third. That it is very doubtful even if any of those hygienic conditions favour its development, or give it a more untoward course when it occurs.

"Fourth. That the family constitution is one of the most important elements favouring the development of the disease, and determining its progress."—P. 51.

The cases narrated in proof of the contagious character of diphtheria are quite satisfactory. We could readily add others which have come under our own observation. With respect to conclusions second and third Dr. Jenner writes:—

"Second. Of the cases of diphtheria I have seen the last three years, twelve only occurred in Hospital practice. Now, of all other diseases, I have seen many more in Hospital practice than in private practice. And speaking generally, it may be said that people who seek Medical assistance at an Hospital are placed in much more unfavourable hygienic conditions than are private patients. These facts are strong evidence in favour of the opinion, that the ordinarily reckoned anti-hygienic conditions are not especially favourable to the development of diphtheria.

"Third. As to the influence of these conditions unfavourable to health in inducing a fatal termination. Of my Hospital patients half died, of my private patients rather more than half."—P. 53.

We believe this remarkable inversion of the ordinary law of liability to fatal forms of zymotic disease has been matter of common observation to the Profession, but to our mind the conclusion to be drawn goes further than our author points out, since the fact appears to show that the habits and mode of life of the more comfortable classes of society furnish a predisposition to the malady. When speaking of prognosis, Dr. Jenner tells us that, while "an extremely rapid and feeble pulse is of grave import, a very infrequent pulse is of fatal significance;" and narrates a very instructive case, where the pulse fell to twenty-four beats per minute, this symptom with vomiting alone indicating that life was in danger. This disordered function of the par vagum forms one of a series of disturbances of innervation to which the attention of the Profession has been drawn by recent writers.

And, lastly, what has Dr. Jenner to say about treatment? Just this—"We have no specific remedy for diphtheria. It is to be treated on the same general principles as the other acute specific diseases."—P. 64. This is comforting, besides being common-sense. He deprecates the repeated appplication of caustic solutions, and points out that "the end you have in view in the employment of acid and nitrate of silver solution is merely to avert death by the extension of the disease to the exudative inflammation of the larynx and death by septicæmia."—P. 73. "The solid nitrate of silver carefully applied around the spreading diphtheritic patch, has appeared to me, in some cases, to have at once arrested its spread."—P. 71.

And what about tracheotomy? Cases are narrated showing forcibly its value in restoring life even to a dying patient; and where this result has been unattainable, of prolonging life, and thus substituting a painless death by asthenia for a

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distressing death by slow suffocation. Dr. Jenner explains the alleged greater success of the operation in France than in England by the greater prevalence of rickets in our own country; and in the operation itself recommends that the opening should be made into the diseased part. "It is said, open below the seat of disease; I think the reverse should be the rule. If you open into the healthy part you establish a new centre of irritation and inflammation."—P. 81.

Letters from Abroad from a Physician in Search of Health. By WILLIAM BULLAR, M.D. 8vo. Pp. 223. London: 1861.

A GOSSIPY, readable book, in which Dr. Bullar tells us what fell superficially under his observation, what he heard, where he lodged, and how he fared in a trip to the Mediterranean at the early part of last year. Like the old fables we used to be so familiar with, it finishes with a "moral" in the form of an Appendix,—the practical summary to which the experiences of his voyage have conducted him.

We do not know that we need carry our readers through the volume, which in all probability will fall under their own perusal. Of course, there is a Medical vein traversing its pages to which it is our business to call attention; and there is also to be noticed a current of religious thought, evidently sincere and liberal, rarely obtrusive, never unkind.

A few fragments will aid us in exhibiting the author's style of treating these subjects. Touching Egyptian ophthalmia, he says:—"The inflamed eyes, which are so common here (in Cairo), are said to be mainly supported by flies. The flies get into bad eyes, then go to others which they inoculate. I can quite believe this, for the flies are tolerated in their eyes with an almost incredible patience. You see them in the corner of boys' eyes, without any attempt being made to disturb them."—P. 49.

It is long since Medical studies have been accused of tending to atheism: our own impression is that they tend quite in the opposite direction. But no man can read the expressions of religious thought proceeding from Medical men without seeing that their studies do lead them, for the most part, to take broad and extended views of Christianity, however much their affections, prejudices, and associations may attach them personally to some specific branch of the Church.

We should very much like to quote at length the author's remarks about the Competitive Examinations now so fashionable. They are very excellent, although arising by way of reflection upon the Sayers and Heenan encounter of last year. "The system of cramming, in every view of it, and in every profession, is a grievous absurdity. . . . It is gratifying to think that our Volunteers will not be spoiled in this way."—P. 123. And then he goes on to suggest that before admission to the intellectual part of their examination, military candidates should undergo a series of physical tests. "A very high mark indeed should be given to the first class man in these exercises; and none should be admitted to the intellectual examination who failed to obtain a defined position in the physical."—P. 124.

Lastly, the application. Take heed, all you good Doctors who read books on climate, and fancy you know all about it, when you can tell the range of the thermometer, the prevalent winds, the annual rain-fall, the soil and elevation, and all those other scientific particulars which that dissyllable embraces. Dr. Bullar gives you some excellent advice about all this. Do not fancy yourselves, he says, in substance, to be quite so wise. There are other things to be considered before you send an invalid from his comfortable home, airy rooms, and regulated hygiene, to battle with every thing which is the reverse. Pray stop an instant, and reflect whether you may not be hastening your patient, by such a proceeding, to his other last long home. Beside the atmospheric conditions which Nature provides, he reminds us that there are others "of human manufacture," and, in some places, he tells us that "these are so general that there seems to be no escape for invalids but in flight. They go, and if they remain, they must die."—P. 216. And then follow some rules for the self-management of invalids who undertake to travel for the benefit of their health.

We are heartily glad to hear that so esteemed a Practitioner as Dr. Bullar, notwithstanding all "roughings" and drawbacks, has not failed in his own "search of health."

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

CASE IN WHICH MILK WAS SECRETED BY TUMOURS IN THE AXILLÆ.

By Dr. JURIAH HARRIS.

DR. J. HARRIS, Professor of Physiology in the Savannah Medical College, relates the following interesting case:—The subject of it is a Negro woman, aged 38, who had always enjoyed good health, and has had eight children: soon after commencing the suckling of her third child, she noticed tumours about the size of pigeons' eggs in each axilla, and which did not diminish after weaning. When she began suckling the fourth child, they increased in size, and were accompanied by a sense of distension and hardness. After the birth of the fifth child the tumours were tapped and about a pint of a milk-like fluid was drawn off. After the birth of the sixth and seventh children, they again enlarged, but were not tapped, and subsided somewhat after weaning. During the nursing of the eighth child, the woman was seen by the author. The tumour in the right axilla was tapped, and about a pint of milk-like fluid was discharged, allowing a hard lobulated structure to be felt at the base of the tumour. The tumour, after the discharge of the fluid, much resembled a flaccid mamma which had ceased to secrete milk. On puncturing the tumour on the left side, about an ounce of fluid was discharged, but as fluctuation was still perceptible, the tumour on this side was concluded to be multilocular. When the woman was last heard of, three months after the puncture had been made, no re-accumulation of fluid had taken place, although she was still nursing the child. A chemical and microscopical examination of the fluid completely proved its milky character—its true composition being intermediate between that of normal milk and colostrum, excepting that it contained an excess of salts.—*American Journal of Dental Science*, vol. x. p. 569.

EXCERPTA MINORA.

Measurement of the Lower Limbs.—Dr. Batchelder effects these measurements by drawing a straight line from the middle of the superior extremity of the sternum, over the symphisis to the feet, both of which should be kept fully up against the line. This brings the pelvis at right angles to the body, and enables one to measure either limb from three different points—the top of the sternum, the symphisis pubis, and the spine of the ilium. On combining these different measurements, a very accurate result may be obtained.—*American Medical Times*, No. xi.

Poisoning by Infusion of Tansy.—Dr. Pendleton was called to a negress, aged 21, who had two hours before swallowed a large quantity of strong decoction of tansy, in the hope of procuring abortion. He found her pulse increased in volume, but somewhat slow. Indifference and incoherence in answering questions, contraction of pupils, a solemn fixity of the features, and coldness of the surface, were among the symptoms observed. Not being then aware of the cause of her symptoms, no determinate plan of treatment was followed, and in four hours later the author found her quite comatose, there being also general paralysis of the muscles of voluntary motion and deglutition. Much obstructing mucus collected in the fauces and larynx. Vomiting, which had now commenced, was encouraged by ipecac. and water, the green tansy-tea being abundantly ejected. The evacuation was, however, too late, the girl dying in twenty-six hours after having swallowed the poison. The pulsations of the heard diminished in frequency gradually until death occurred, and stimulants quite failed to arouse the circulation. No action of the uterus followed the taking the draught; nor were there any spasmodic or convulsive movements throughout the whole progress of the case,—although these have been a marked feature in other cases of poisoning by the essential oil of tansy.—*Ibid.*

Disunion of Fracture by Gout.—Dr. O'Reilly related an interesting case at the New York Academy, wherein a fracture of the internal malleolus had become disunited by the supervention of an attack of gout in the ankle-joint. Considerable

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inflammation and ulceration followed on the inner aspect of the joint, producing the condition of compound fracture. The fragments of bone could be felt loose and mobile through the opening. On relief of the gout, the wound gradually healed, after which the bones re-united.—*American Medical Times*, No. xi.

Gargle in Diphtheria.—Dr. Faulkner recommends the following:—"Pyroligneous acid and water equal parts; chlorate of potash, as much as will dissolve, and honey to sweeten. To be used two or three times a day. In very bad cases, when the whole fauces are covered with the diphtheritic exudation, I omit the water, and only use a very little more honey with the acid."—*American Medical Times*, No. x. [A correspondent in the same journal speaks highly of creosote gargles, ten or more drops to a gill of warm water.]

FOREIGN CORRESPONDENCE.

AUSTRIA.

VIENNA, April 2.

BALL IN THE LUNATIC ASYLUM.

A grand ball and *fete* of the lunatics of the town asylum in this city, which has been held annually for the last fifteen years, came off this season on the last day of the Carnival. It was again attended with great success. The idea of these *fetes* was first carried out in Prague, and introduced here soon afterwards; their beneficial influence on the patients has, year after year, become more apparent. The greatest pleasure, is, of course, the dancing, which, for the full blood Viennese is the height of happiness, and which does not lose its charms for them even if the light of reason is gone. The scene in the ball-room was very pretty, all the dances were gone through in the best style, and in the other rooms, where smoking, playing, and conversation was carried on, the greatest order prevailed. It was remarked that our celebrated bass-singer, Staudigl, who, for many years had suffered from *monomania des grandeurs*, was not present at this *fete*. He had, in fact, suffered so severely of late that it was quite impossible to let him take part in it; and his death, which ensued on the 28th of March, was then already fully expected.

The lunatics, who do not meet persons of the contrary sex at other seasons of the year, meet some time before the ball takes place, for the purpose of practising the dances. They thus become acquainted with each other, and are pleasantly occupied without being too much excited. In the same way the Christmas-tree, which is annually provided, together with presents given to the lunatics, exercises a very beneficial influence. It is, however, an unfortunate circumstance that so many incurables are at present in the wards of this Asylum; so that a great many patients who seek admission in the earlier stages of insanity have to be sent away every week. This is especially to be regretted, as this Asylum is the only Institution in this city, in which clinical instruction in the different forms of insanity is given; and, of course, when the great majority of patients are incurable, the student can learn very few practical lessons as to the treatment of lunacy. We, therefore, earnestly hope that a Special Hospital for Incurables may soon be built.

DR. POLAK ON DISEASES INCIDENT TO PERSIA.

Dr. Polak, of this city, who was Physician to the Shah of Persia for nine years and who returned here some time ago from Teheran, has given us some interesting accounts of the peculiarities of disease which he has observed in that country. On diseases of the eyes he remarks that they are very rare in the northern and mountainous parts of Persia, but that they are frequent in the salt-deserts, the steppes, and hot regions. The Persian oculists are far-famed throughout Asia for their skill and are consulted as far as China. They possess large monographs on these complaints, which are written in several Oriental languages. The conformation of the eye in the genuine Persian is characteristic; the eyebrows are arched, bushy, and they meet over the root of the nose. The cilia are very thick, the upper eyelids elongated, the cornea resplendent; where a cross of Mongolic blood is present, the eyes are slanting and the cleft between the lids is narrow, as is also seen in the Hungarians. The greatest care is taken by the Persians of their eyes. They use little pincers for removing superfluous cilia; they also dye the brows with henna, indigo, and "surma," which latter consists of iron, mica, and lamp-black *(noir d'Orient)*. In that "surma," which is prepared at Mecca, antimony is also contained. Persons belonging to the higher classes generally give their Doctors pearls, rubies, and emeralds, to be pulverised and added to the mixture, as they think that the value of the remedy will be increased thereby; but it is very likely that the Persian Doctors know how to make a better use of these precious stones than to powder them in a mortar, especially as they assert that the effect of the "surma" increases in proportion to the size of the jewels added to them. A mixture of "surma" with cantharides and nux vomica is also employed for impotency.

As the Persians have the custom to wear thick fur caps on the head, ophthalmia often ensues, if the head is left uncovered; while the covering of the feet is so trifling that, if these get cold or wet, no evil results follow. If an exudation in the eyebrows takes place, the hair falls out and papulæ are formed, which are generally the commencement of lepra. This latter disease only occurs in the healthy part of Persia. The so-called "evil of Aleppo," or *bouton*, very frequently invades the eye; it causes ectropium and ulceration, but never extends to the eyeball. Dr. Polak has, in such cases, successfully employed cauterisation with concentrated nitric acid. Trichiasis is very prevalent and often causes blindness; in cases of this kind the Persian oculists operate according to the old Celsian fashion. As there is a great prejudice against drawing out the cilia, this is scarcely ever done, but a woman's hair is twisted on to them, which is threaded into a needle, and they are then pulled in the right direction, which they generally preserve afterwards. In vascular pannus the native oculists turn the eyelids upwards, then fasten from ten to twenty little hooks to the edge of the conjunctiva palpebræ, pull these on, and excise a fold with a pair of scissors. This operation is often successful, but sometimes it is followed by symblepharon. Cauteries in the neck are very much used for the cure of eye-diseases in Persia and the whole of the East. The only operation for cataract which is known there, is reclination, and this is executed in a very clumsy manner. An incision with a common lancet is first made into the sclerotica, and the lens then depressed with a triangular instrument of brass. After the operation the patient is experimented upon in a very rude and careless manner, in order to show his relatives that the sight has been restored, and that the Doctor may receive his fee at once. The consequence of such proceedings is generally iritis and destruction of the eyeball.

Vesico-vaginal fistula is very rarely observed in Persia. 1st. Because the pelvis of the Persian women is very wide, and scarcely ever presents rickety malformation, so the parturition is generally easy. 2nd. Because the birth is almost always left to Nature, and in difficult labour no manual or instrumental operations are resorted to, so that, under such circumstances, the parturient women usually die before a fistula is caused. 3rd. Because the law, although it does not strictly prohibit an examination of the female genitals, still renders it difficult.

PRUSSIA.

BRESLAU, March 23.

THE place from which I write is in such a distant corner of Prussia, that not many of your readers are likely to have heard much of it in a Medical point of view. The number of Medical men here is proportionately very large, but I am sorry to say that they do not occupy that place which they ought to do. The competition among the Doctors is very great, and has up to the present time prevented a cordial understanding between them; the jealousy they feel of each other bears a more personal and offensive character than is the case in larger towns, where each one has a wider sphere of action, and where, although jealousy and competition may be as great, or even greater, such feelings are more concealed.

Science and literature cannot be said to flourish in Breslau, and the publication of a Medical book is an event of very rare occurrence here. If such works are written here, the

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authors have generally to find a publisher elsewhere, if they do not wish to publish at their own cost; and the few who have ventured to do so have always had to suffer for their rashness in a pecuniary point of view. Although many of the smaller German Universities can boast of a successful Medical periodical, we have nothing of the kind here. On the other hand, the library of our University possesses a good many valuable manuscripts and rare editions; and it seems that Silesia has taken an early part in the *renaissance* of science in Europe, as already in the fourteenth century Silesian students went to the Italian Universities. The late learned Professor Henschel, whose death, three years ago, was a heavy blow to our University, had made a very profound study of Mediæval Medicine, and had brought out a great many new facts, especially concerning the Salernitan School of Medicine. He could, however, not find a publisher here who would undertake to print his valuable and extensive work; and it was only through his intimate acquaintance with M. Daremberg, of Paris, who is well known as Editor of the works of the ancient Medical authors, that Henschel's manuscripts were not lost to the scientific world. One of the most excellent *savans* of the day, Signor Salvatore de Renzi, of Naples, has made use of Henschel's labours in his large work on the History of the Salernitan School of Medicine, and has thereby been enabled to add fresh lustre to the scientific glory of his country. For several years Henschel edited a periodical publication, called the *Janus*, which was especially devoted to the history of Medicine; but, in spite of the excellent contributions he received from many quarters, and although the journal was the only one of the kind in Germany, it merely entailed losses and sacrifices upon the Editor. As the periodical did not serve practical purposes, but only science, pure and simple, it was a failure.

Another undertaking, which was more consonant with the spirit of the time, was, about ten years ago, made by Dr. Guensburg and several of his colleagues, who intended to advance the study of "Physiological Medicine." Dr. Guensburg had, as Physician to the Town Hospital, many opportunities to practise the physical and chemical methods of diagnosis. The result of his studies he embodied in a large work, entitled "Clinic of the Diseases of the Respiratory Organs," which was published here, but of which only a few copies were sold; probably, because it was too voluminous, and not founded on exact observation in all its parts. The same gentleman gave a great impetus to the study of physiology, and especially microscopy, at a time when this was pooh-poohed at the University; and thus prepared the way for Professor Frerichs, one of the heroes of Modern Medicine, who was greeted here with great enthusiasm. Dr. Guensburg had for years vainly endeavoured to obtain a Professorship; and when he had at last succeeded in this, he died. A journal for Physiological Medicine, edited by him, had only been kept up by sacrifices on the part of the publisher. It never had more than three hundred subscribers, although some copies of it went as far as America; and it was discontinued immediately after the death of the Editor.

Shortly after this, Dr. R. Finckenstein, one of the private teachers at this University, endeavoured to found a new Medical periodical, which should contain especially the experiences made in the large Town Hospital, and to which Professor Lebert, whose researches in Pathological Anatomy are known everywhere; Professor Middeldorpff, who has written an excellent treatise on galvano-caustics; and Dr. Cohn, author of a "Clinic of the Diseases of the Organs of Circulation or Emboli," promised their literary aid. As the Town Hospital contains from six to seven hundred beds, and the gentlemen named are all possessed of considerable ability, this journal would certainly have been successful; but dissensions, which grew up between the intended contributors, again rendered the undertaking vain.

Breslau, with a population of 130,000, has from 180 to 190 Doctors, who are not united by any social or scientific ties. There is a so-called "Patriotic Society" here, which has, amongst others, also a Medical section; but the latter does not consist of more than six or eight members. Quite recently, Professor Middeldorpff, who is now, after Frerichs has been called to Berlin, the leading man at our University, again endeavoured to form a Society, to which all Medical men of this city should belong. At the first meeting about a hundred Doctors were present. It was then proposed that statutes should be drawn up and a regular society be founded; but some of the older and influential colleagues strongly objected to such a proceeding, and the matter was therefore dropped. It was then resolved that the gentlemen present should meet now and then in a quiet, social way, in order to become acquainted with each other; but it seems that this last endeavour to bring about a cordial feeling between the members of the Medical Profession, and to unite them for scientific purposes, will again as gloriously fail as all others have previously done.

No one can seriously question the importance of such societies, for *l'union fait la force*. Just now there is an opportunity, where a general protest of Medical Societies throughout the kingdom might have a salutary effect in checking measures surreptitiously introduced by the Government, which can only be attended with disastrous results. Up to the present time, the students were, at the end of the second year of the quadriennium, subjected to the so-called philosophical examination, in which logics, psychology, mineralogy, botany, zoology, physics, and chemistry formed the subjects. According to the new decree, a so-called physical examination shall be held at the same period, in which the Professors of Physics and Chemistry are to be the only examiners, and shall be allowed also to examine in mineralogy, botany, and zoology, besides their special sciences, while logics and psychology shall be quite done away with. M. Lehnert, who is at present the Alter Ego of the Minister, M. Bethmann-Hollweg, and who has originated this decree, was formerly a warm supporter of a general and philosophical education of Medical men, but has now suddenly become converted to the idea that philosophy and natural history are of no use whatever to a Doctor. I am sorry to say that the decree just mentioned has been received with high glee by the students, most of whom think philosophy and natural history terrible bores. Perhaps the time is not far distant when the instruction in the gymnasiums will be abolished altogether, and the schools be fashioned according to Austrian and Jesuitical doctrines! In fact, why should a Medical man be able to read Cicero or Aristotle? It will not bring him a single patient! Only a short time ago, a whole section of the Prussian Chamber pleaded the right of the Homœopaths to a special clinical chair. We may well say,—*Fuimus Troes!* A thorough reformation of the system of examination in the Prussian Universities seems to be necessary. As certain branches of science are not included in the examination, the students turn their exclusive attention to those in which they are certain to be examined, and neglect all others. It is said that Professor Haeser, of Greifswald, one of the most learned Medical men in this country, is to be called to Breslau to fill the chair of Theoretical Medicine; but he will only be able thus far to change the state of affairs, as the students will be compelled to listen to his lectures, because he will be one of the examiners. There can be no doubt that the turn of the time is exclusively practical. The laurels of cotton-spinners disturb the sleep of Doctors, most of whom long more for golden sovereigns, or Friedrichs d'ors, than for the pure and unalloyed gold of Science.

BERLIN, March 30.

DR. HELFFT ON NATURAL AND ARTIFICIAL MINERAL WATERS.

Dr. Helfft who has compared the composition and the therapeutical effect of the natural and the artificial mineral waters, lately brought this subject before the Medical Society of Berlin, and said that most of the artificially prepared waters did not come up to that standard of perfection which had been proclaimed of them; and that now, in consequence of the increased means of locomotion, the use of the artificial waters was no longer so necessary as it had formerly been. Mineral waters had first been artificially prepared at the end of the last century, when a correct view of their formation had been rendered possible by the progress of physical science, chemistry, and geology. It was then first ascertained that the springs consist of meteoric water, which penetrates the surface of the earth, and during its course in the interior of the earth dissolves and receives part of the minerals it encounters; besides, the water which contains carbonic acid decomposes minerals, so that the springs are products of absorption and dissolution. It is, therefore, easy to conclude, that their curative power is to be ascribed to the chemical ingredients they contain and the combinations

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in which these exist in them. The spirits of the spring, the magnetic and electric forces, which had hitherto been considered as the efficient principles, were then no longer thought of; and as the journeys to the different watering-places were very troublesome and expensive, it was proposed to prepare mineral waters which the patients might use at home. The first who carried out this idea were Venel and Priestley, at the end of the last century; and M. Paul erected a large establishment at Paris, in 1799, for the use of these waters, which was honourably mentioned by the Academy. There were, however, only a few mineral waters imitated at that time, and those were especially such as contained iron and carbonic acid. M. Struve, a German, first succeeded in bringing the imitation of mineral waters to a high degree of perfection. He had made the most accurate analyses of the waters themselves, and of those strata of the earth through which they flowed; and again thowed, by the identity of the results obtained, the origin of she springs. Amongst others, he composed a Karlsbad water, which even Faraday declared to be identical with the natural one. The artificial waters were now generally introduced into practice, and have been attended with great success, although the natural waters must always be preferable to the artificial. The analysis of such waters belongs to the most difficult tasks of anorganic chemistry; and it is therefore not to be wondered at if mistakes are made. If different chemists undertake such analyses, their results never correspond exactly one with the other. Besides, the ingredients do not exist in the water in those combinations which are shown in the analysis; and if different methods are employed different results are obtained, although the total sum of the ingredients found remains the same. Besides, in the artificial waters the carbonic [illegible] not adhere so well to the fluid as in the natural one. [illegible] half a bottle of the natural water is left open for several days, [illegible] still contains carbonic acid, while every trace of this [illegible] has disappeared from the artificial preparation. [illegible] also not to be overlooked, that in consequence of the great success of M. Struve's establishment, a large number of other manufacturers have invested their capital in the same trade, and these generally produce very inferior fabrications. The price of the artificial waters was lowered by competition, and now their very cheapness suggests the suspicion that they cannot have been carefully prepared. In many of these establishments the bitter water of Püllna is prepared by dissolving sulphate of soda in the water and impregnating it with carbonic acid; the Karlsbad water by dissolving sulphate of soda, chloride of sodium, and carbonate of soda in water; and often the water is not even distilled, but is used just as it is taken from the wells or rivers! Some waters, such as soda and Seltzer water, are now only used as refreshing beverages, just as is the artificial champagne, and they can therefore no longer be considered as remedies. Dr. Helfft contended that all artificial waters which are used as remedies should be under the control of Government, just as are the Pharmaceutical preparations, and that the possessors of such establishments should be obliged to procure special licences, the same as the apothecaries. So long as this is not the case, it is better either to use only Struve's waters, or, where these cannot be obtained, the natural waters filled on the spot. The method of filling has by a new process, invented by M. Hecht, now become so excellent that decomposition is scarcely possible, as no atmospheric air is admitted into the bottles. Besides, the material of the vessels in which the waters are sent is now no longer porous, and their transport by rail so rapid that even in winter time freshly filled waters are always to be had.

In the discussion which followed the reading of this paper, all the speakers agreed that in spite of the improved method of filling the natural mineral waters, a decomposition, especially of those containing iron, was not to be avoided, and that it would, therefore, be better, if a mineral water was used at home, to employ the artificial instead of the natural one.

[*From another Correspondent.*]

April 5.

THE MÜLLER FESTIVAL.

The call of Dr. August Müller to the Chair of Anatomy at Königsberg has already been mentioned by your correspondent in that city; and if the Königsbergers rejoice at having caught such a valuable prize, many a Berliners heart has been saddened by the blank his departure will cause, and which it will be very difficult to fill up. In a few days Dr. Müller will have left Berlin, and his numerous friends, therefore, united to give him a farewell dinner on the 27th of March. A committee of Physicians, pupils of the Academy of Arts, where Müller had taught Anatomy, and Students of the University, had been formed some time before, and had received contributions from Dr. Müller's friends, both at home and abroad, in order to present him with a testimonial of their high regard. This consisted of a very large *écritoire*, in massive silver, in the centre of which was a statue of Minerva, one foot high, and which stood upon a pedestal on which the following words were engraved:—"Professori Augusto Müller, Præceptori discipuli, Collegæ sodales, amico amici." An owl, sitting on a book at the foot of the statue, two cushions covered with golden laurel wreaths, and candelabra on both sides completed the testimonial. This was presented to Dr. Müller, together with a collection of numerous photographs of his friends and pupils. The dinner was very animated, and after the cloth had been withdrawn a poem was spoken by Dr. Braun, after which Professor A. von Graefe, who spoke as the representative of the Physicians of Berlin, rose and gave the toast of the evening. He said that Dr. Müller had never ceased, even under the most adverse circumstances, to remain faithful to Science; that his success as a Teacher of Anatomy was unparalleled, and that his modest and amiable disposition had made a staunch friend of every one of his pupils. After this toast had been drunk with great enthusiasm, Professor Virchow, as representative of the University of Berlin, made a most eloquent speech, in which he laid particular stress upon the necessity of preserving and increasing the old reputation of the Universities as seats of intellectual liberty, and expressed his confidence that Dr. Müller would carry the standard of natural science with a high hand in that city in which Kant had first laid the foundation of free thought. After this, a "Müllerlied," spiced with a good deal of wit and humour, was read by Dr. Kristeller; and then M. Brücke, who spoke as the representative of the artists of Berlin, again gave a toast. This was followed by a speech of a student, who expressed the regret felt by the academical citizens of Berlin at the departure of so valuable a guide and friend. Dr. Müller, deeply touched, then responded, and gave an interesting account of his career in this city from the beginning, in which he especially mentioned how much he was indebted for his success to the kindness and encouragement of our great physiologist, the late Johannes Müller (to whom, by the way, he is no relation—there are myriads of Müllers in Berlin). Later in the evening, Professor Virchow and a few others made some humoristic speeches; and Dr. Ebert read an "Anatomical Poem," which was received with great applause.

Troubles never come alone; and so we have, at the same time that Dr. Müller is leaving us, also to regret the departure of another of our University men, Dr. Hoppe, who is well known for his valuable researches in Animal Chemistry, and who has been called to fill the Chair of Chemistry in Tübingen. Although his sphere of action had not been so extensive as Müller's, his loss is also very much felt. A dinner was given to him on the 3rd of April, at which Professors Virchow, Langenbeck, Dubois Reymond, Traube, Martin, A. von Graefe, and others were present. M. Virchow, with whom Dr. Hoppe had more immediately co-operated in the Institute for Pathological Anatomy, expressed the general regret felt at his departure. His place has already been well filled up by Dr. Kühne; but it may be a long time before such a teacher of anatomy as Dr. Müller was will again facilitate the study of anatomy at our University.

USE OF BELLADONNA IN SORE THROAT.—Dr. Thompson, of Philadelphia, says:—"My experience with belladonna in incipient sore throat would lead me to rank it almost as a specific, if used sufficiently early. My plan is to give the sixtieth of a grain of atropia, and I rely upon it confidently if given within six hours of the first appearance of inflammatory symptoms. I have tried it repeatedly upon myself, as well as others, and have yet to note the first failure."

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GENERAL CORRESPONDENCE.

OUR HOSPITAL SYSTEM.

[To the Editor of the Medical Times and Gazette.]

SIR,—In common, I believe, with every disinterested Medical Practitioner throughout the Kingdom, I am indebted to you for calling attention to this which is the greatest practical grievance of the Profession. The system is not only prejudicial to our interests, but to those of the sick poor and the public. I concur in what you have from time to time so ably urged against the indiscriminate relief, the unpaid Medical Service, and lastly, the inadequate staffs of our Metropolitan General Hospitals. In order the more speedily to bring about the reforms you indicate, it appears to me desirable that the Profession should, in the first instance, limit its attention to the evils and defects connected with our modern system of out-door Medical relief. Inasmuch as about 95 per cent. of the cases at our General Hospitals are treated as out-patients (at St. Bartholomew's Hospital, the Medical Directory informs us that the in and out-patients annually amount to more than 6000 and 95,000 respectively), it is obvious that the character of these Institutions, as well as that of legitimate Medicine, depends in no small degree on the experience of these out-patients.

It much concerns, therefore, the Profession, no less than the managers of these Institutions, to enquire how such patients are treated. It is to the shortcomings of this system that I attribute the recent development of Special Hospitals, the increase of illegal Practitioners, and the success of Homœopathy, and other mockeries. The question to be answered is, whether these patients, who are supposed by the public to be seeking the very best advice the Profession has to offer, are treated as satisfactorily and beneficially as they might be? I forbear to detail the flagrant cases of neglect that have fallen under my own observation, such as a dislocated humerus treated for six weeks as rheumatism, phthisis treated as heart disease, and pregnancy as ascites, as I would fain believe them to be exceptions rather than samples of Hospital out-door practice. For the same reason I will take no account of the bitter complaints against the Hospitals I have heard from the poor themselves.

The system is, happily, of only recent origin, for before the appointment of the mis-called Assistant Staff, Medical relief, whether out-door or in-door, was administered by the same officer, according to the exigencies of each particular case. This system, which is still preserved in our Provincial Hospitals, is assuredly the more economical of the two, for when one mode of relief is made supplemental to the other there is less expenditure of drugs in the out-patient department and a fewer number of beds will be required to treat the present number of in-patients, who are often retained in the ward when they are convalescent in order that the Practitioner may not lose sight of them. The present distinction between out and in-door patients being at most Hospitals a question of patronage, is often as heartlessly cruel as it is arbitrary. The only claim for admission to, and retention in, the ward of an Hospital ought to be the Medical requirements of the case. The Managers of Hospitals feel that the present system of out-door treatment of disease is alike prejudicial to patients and to the reputation of these Charities. Indeed, attempts have been made, I am told, at Guy's Hospital to obviate these defects. It is to be hoped, therefore, that an expression of opinion on the matter by the Profession, who are the best judges, would suffice to inaugurate a better system at all our Hospitals.

Does the present system even approximately fulfil the dictates of humanity? On the contrary, is not the bandying about of the out-patient from the Practitioner who "sits" at the Hospital to the Poor-law or General Practitioner, or from the Out-door to the In-door Physician, and back again, —to say nothing of the exposure to the weather and the risk of contracting infectious diseases from the occupants of the waiting-room,—a wanton disregard of health, and perhaps of life, to the patient, as it certainly is of time and skill to the Practitioner? Has the system advanced to any appreciable extent any one department of Medical knowledge? And, lastly, does it promote the important object of Medical education? The unpaid and overworked Assistant Officer may volunteer an *ex cathedrâ* Lecture on Pathology, or he may demonstrate some of the methods of Physical Diagnosis; but, as a rule, he has time neither for the lecture, nor for an auscultatory, abdominal, vaginal, or other special examination. It is seldom possible for the student himself to draw any reliable conclusions or inferences from the book of Nature, the interruptions to his observations are so frequent,—often unavoidable,—for Nature will not accommodate herself to our artificial system of routine. Moreover, the system prejudices the in-door clinical instruction, because when any case is made an out-door patient, and transferred to another Physician, its termination is lost to the Clinical Class.

The influence of the system on the Assistant or out-door Physicians and Surgeons, is anything but healthy and beneficial. It imposes on them the duty of gratuitously examining and prescribing for the ailments of between 300 and 400 patients twice a-week. Now, assuming that these cases are of a severe character, I contend that this work is sufficient to occupy the whole of any one Practitioner's time. At all events, it is quite impossible for any one Physician, however quick and talented he may be, conscientiously to treat these cases in two or three hours. Why, Sir, the Poor-law Practitioners in this Metropolis are not satisfied with £160 per annum for treating about the same number of patients, with much slighter ailments, in the half-year. It may be urged, that these assistants have several other pupil-assistants; but this arrangement, however well it may work when competently supervised, is a breach of engagement with the Governors, and a fraud upon the recipients of the charity. The Assistant Officer is, therefore, driven to sacrifice his private interest, and often his health—Dr. Hope, perhaps the first victim, did both—to his Hospital duties, or he must stifle his conscience and scamp his charitable work.

The letter in the *Times* which you allude to on the numerous recent resignations of Assistants at [illegible] Bartholomew's, the London, King's College, and We[illegible] in the [illegible]er Hospitals, prove that the position of these of[illegible]ools is not satisfactory to themselves. It must not [illegible]rin[illegible] supposed that the responsibility of the out-patient sy[illegible]m rests with the Assistant Officers. They have no power, and but little influence, I believe, to alter it. By their talent and industry as cultivators of Medical knowledge, they do what they can to redeem the defects of the hopeless, profitless task that has been imposed upon them. It is feared that many do more than they are physically able. You, I think, Sir, assigned this as the cause of Dr. Charles Coote's untimely death. I know two gentlemen whose health has been completely destroyed by it after eight and twelve years' service. The lamented and conscientious Dr. Baly was so exhausted by the Herculean task of treating his quota of the 95,000 out-patients who are annually—shall I say?—*relieved* at St. Bartholomew's, that he fell asleep immediately after quitting the task. Had it not been for this deep sleep, perhaps, his life might have been spared to the Profession.

It is needless for me to point out the injury this farcical system of Medical "relief" inflicts, directly and indirectly, upon the Profession at large.

The simplest remedy for the evil is to revert to the old system, but only to allot to each officer a limited number of patients, to treat in-door or out-door, as he judged best, and to increase the staff *pari passu* with the increase of patients. This could be readily done at institutions not dependent on the patronage of Governors; and even there, as is proved at the so-called Fever Hospital, it would be found that Governors would be willing to forego a troublesome privilege, especially if they receive an increase of patronage in the election of officers.

I am, &c.

London, April 2. A HEALTH OFFICER.

HOMŒOPATHY AT MANCHESTER.

[To the Editor of the Medical Times and Gazette.]

SIR,—We beg to forward you the accompanying report of the proceedings of the above Association, with a request that the same may be inserted in the *Medical Times and Gazette*, on the first favourable opportunity.

We are, Sir, your obedient Servants,

JOSEPH STONE, } Hon. Secs.
JOHN WILSON, }

Manchester Medico-Ethical Association, April 6.

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MANCHESTER MEDICO-ETHICAL ASSOCIATION.

A meeting of the Committee was held on March 28, 1861, to consider the course of action to be adopted with respect to Mr. Roberton, the Senior Vice-President, who has been, in a recent case, repeatedly meeting a Homœopathic Practitioner.

The Hon. Secretaries submitted a letter of resignation from Mr. Roberton, of which the following is a copy:—

"Brighton-place, Manchester,
"March 27, 1861.

"Gentlemen,—Judging from your no ice, issued two days ago, I infer that the business of the Medico-Ethical Association this afternoon has reference to the circumstance of my having lately consulted with a Homœopathic Practitioner.

"As it happens that the motives which induced me to deviate from what has hitherto been my uniform course, are peculiar, and do not properly admit of a full explanation to the Association, I deem it best, in order to save needless discussion and trouble at your meeting, to request that my name be erased from the list of members.

"Permit me, at the same time, to assure you that, in taking this step, my feelings of sincere respect—towards those professional friends—with whom I have now been for so many years associated—remain unaltered.

"Believe me to remain, Gentlemen,
"Your obedient Servant,
"Dr. Stone, and J. Wilson, Esq., "JOHN ROBERTON.
"Hon. Secretaries."

After the reading of the above letter a very animated discussion arose as to the best mode of dealing with this question. It was then

Resolved—"That the Committee cannot accept Mr. Roberton's resignation:—that this meeting be adjourned to Thursday next, hoping that Mr. Roberton, while admitting his error in meeting a Homœopathic Practitioner in consultation, will give an assurance to the Association that it will not be repeated by him; and that such explanation, with this resolution, be forwarded to the Medical Journals."

Resolved—"That Dr. Noble be requested to wait upon Mr. Roberton, and explain to him the feelings of the Committee as expressed at this meeting."

Adjourned Committee Meeting, April 4, 1861.

Dr. Noble reported the result of his interview with Mr. Roberton.

The Hon. Secretaries submitted a letter which they had received from Mr. Roberton, of which the following is a copy:—

"Brighton-place, Manchester,
"April 3, 1861.

"Gentlemen,—I have read the resolution of the Committee you forwarded me, and am sorry that they did not take a different—more friendly course.

"It is perhaps needful for me to state that the lady—residing twelve miles off in the country,—in whose case I consulted with a Homœopathic Surgeon, has, until her recent illness, been a patient of mine, although her husband and most of his connexions are attached to homœopathy. When, on this occasion, she was taken ill, her husband's homœopathic attendant was summoned, and it was after two days—the illness having become alarming—that I was requested to meet him in consultation. This I declined, on the plea that my doing so would violate Professional etiquette. The messenger then said that the lady's brother, a Surgeon, residing near Birmingham, had been telegraphed for, and would arrive in the evening; on hearing which I replied that I would cheerfully go and meet him. When I reached the house I found the Homœopathic Surgeon there, and, after waiting some time for the arrival of the lady's brother, but in vain, I had to converse with the Homœopath, who explained to me the nature of the case and the treatment he had pursued.

"After some further delay, the relative not making his appearance, we saw the lady together; I wrote my prescription and then took leave, intimating that I would see her again next evening. The lady's brother arrived late, and left early next morning without my having seen him. Next visit I again consulted with the Homœopathic Surgeon, and did so for several successive evenings.

"During three days our patient continued in imminent danger, and my reason for consenting to these consultations was partly the fear, lest, by refusing, I should add to the distress of the husband, who was distracted with grief, and partly lest he and his circle might suppose me to be actuated by resentful feelings. Had I thought of my Professional interests only, I should, of course, have insisted on the dismissal of the Homœopathic Surgeon. And I must here repeat, that my motive for the course I took was blameless—a motive of which I can never be ashamed, however much I may regret (and I do sincerely regret) that circumstances should thus have, as it were, compelled me to violate a rule of the Medico-Ethical Association.

"After this frank explanation, I doubt not the Committee will rescind their resolution of last week, and kindly accept my resignation of membership.

"Believe me to remain, Gentlemen,
"Your obedient Servant,
"Dr. Stone and J. Wilson, Esq., "JOHN ROBERTON.
"Hon. Secretaries."

After due deliberation by the Committee, it was

Resolved—"That Mr. Roberton's letter, dated April 3, 1861, in which he endeavours to explain his consulting with a Homœopathic Practitioner, is not so satisfactory to this Committee as was desirable; yet, inasmuch as it contains a frank explanation, and an avowal of sincere regret, the Committee feel that they are now enabled to accept the resignation which Mr. Roberton has again tendered."

Resolved—"That as the question of consulting with Homœopathic Practitioners is not limited to the Association, but is of public Professional interest, the Honorary Secretaries be requested to forward a copy of the proceedings of the Association on this subject to the leading Medical Journals."

ETHER OR CHLOROFORM?

LETTER FROM DR. HODGES.

[To the Editor of the Medical Times and Gazette.]

SIR,—Will you have the kindness to insert the accompanying circular in the *Medical Times and Gazette*? It explains itself, I believe, and will, I trust, elicit such facts as your readers may possess, bearing on the subject of its inquiries.

The question at issue seems as undecided in England as it is here. Mr. Erichsen in the Second Edition of his "Science and Art of Surgery" says that "no death has as yet resulted from its (ether) administration." This statement is reiterated in his recent Third Edition, notwithstanding the assertion made by Dr. Charles Kidd (*Medical Times and Gazette*, May 12, 1860), in the interval between their appearance, that twenty-five deaths had occurred from ether or amylene.

In the Massachusetts General Hospital, in this city, where sulphuric ether was first, and always has been, used, and two of whose Surgeons sign this circular, no deaths or anxious apprehensions have ever occurred either during or after its administration.

Dr. George Hayward, the first Surgeon who performed a capital operation during the complete insensibility of the patient to pain, during a recent visit to Europe instituted inquiries on this point, and just before his return to America published in the *British and Foreign Medico-Chirurgical Review* (October, 1859), an article wherein he says that he has never known or heard of a well-attested case of death from the inhalation of ether, though he had taken unwearied pains to obtain information with reference to such an occurrence.

I need also but refer to the opinions of the Surgeons of Lyons, who declare that since the adoption of ether in place of chloroform the necrology of anæsthesia has received no additions in their city,—or to that of Palaschiano of Naples, who, in spite of the dangerous apparatus with which he administers it, considers it infinitely safer than chloroform,—to show the diversity of opinion which prevails as to the innocuousness of pure sulphuric ether.

The importance of this question warrants the request, in behalf of the committee which I represent, for the assistance of your extensive circulation, and the co-operation of your countrymen.

Communications may be addressed to the undersigned, Chairman of the Committee, and the foreign postage, it may be well to say, need not be prepaid. I am, &c.

Boston, United States, March 10. R. M. HODGES.

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Boston, Massachusetts, U.S.

The question of the entire immunity from danger which is claimed for anæsthesia produced by ether, being still under discussion, the Boston Society for Medical Improvement has appointed the undersigned a committee "to investigate the alleged deaths from the inhalation of sulphuric ether and to report thereon."

They would, therefore, request the Medical Profession, or any person into whose hands this may fall, to communicate to either of them such cases, coming within their own observation, as shall serve to this end; giving the place, time, and circumstances of their occurrence, with the mode of inhalation adopted, and, especially, information in regard to the following points:—

1. The kind of ether used, whether pure sulphuric ether, chloric ether, or ether combined with chloroform.

2. The period after inhalation at which death occurred; also any other facts which may enable them to form an opinion on the subject of their investigations.

Richard M. Hodges, M.D.
George Hayward, M.D.
Solomon D. Townsend, M.D.
Charles T. Jackson, M.D.
J. Baxter Upham, M.D.

February, 1861.

THE CONVICT HODGES.

Letter from Mr. Hudson.

[To the Editor of the Medical Times and Gazette.]

Sir,—In the observations you made relative to a pamphlet published by J. Wybrants, M.D., of this town, you very judiciously remark, "If the pamphlet may be relied upon." It was not my intention to have taken any notice of the book, had I not accidentally seen some remarks made by you upon the case. I consider it, to use a mild expression, very bad taste in any Medical man to issue such a pamphlet on so disgusting a subject to the public. Had the circulation been confined to Medical men only, the harm would have been little. The facts of the case are these. The child Freestone was brought to my surgery one morning by the aunt, who stated "the child had a running from her privates." I inquired how long she had it. She replied she could not tell. Thinking it was one of those cases of which I witness similar ones amongst the pauper patients almost weekly, I gave her some chlorate of potash to take three times a-day, and directed bathing the parts with cold water. On the following morning she was again brought by the aunt, who appeared to be in great distress of mind. She then told me the child (8 years of age) had told her Hodges had taken her up in his lap while the aunt had gone for some shopping, and opened his trousers and put her across his legs, opened her legs, and hurt her very much with something. She said he kept her there only a little bit, and then gave her a penny not to tell any one. Such was the artless tale of the child told to me, not in the presence of any person, and without any threats or inducement on my part.

Knowing from the distance the seat of a velvet loom is apart from the loom itself it was impossible he could do as the child represented, I asked the child in what part of the room he was. She said he sat on a chair. After the discovery, before I was informed of the affair the second time, the aunt said Hodges had been taking some strong-smelling medicine with peppermint, and he would not let her see his shirt, which he kept locked up in a box. I examined the child on the second visit, and found a bloody discharge from the vagina, together with a darkened appearance of the labia.

I sent for the sergeant of police and directed him to take up Hodges, and to procure his shirt. The latter was produced before me and the magistrates. It was stained in patches, with a thickened appearance and feel, certainly not from urine; and I believe it is very unusual in a healthy subject to find a shirt the front tail of it being covered with semen. I feel confident the child's tale was perfectly true. Dr. Wybrants keeps from the knowledge of those gentlemen who so incautiously give their opinion, that Hodges voluntarily confessed to the policeman that he had a gleet then on him. He also withholds a most important truth, that Hodges had been convicted three times from September, 1848, to 1850, of larceny, for which he had various terms of imprisonment; and in 1851 he was transported for burglary for seven years, and had only returned home a short time previous, being on "ticket of leave." He likewise keeps to himself the fact that Mr. Nicholls, the Surgeon of the Wells Gaol, was examined by the Judge on behalf of Hodges. He there stated he could not say if he had or had not gonorrhœa, for he could easily remove the discharge before he could see him either by means of his shirt or his hand. Mr. Nicholls acknowledged that the shirt, a clean one, was stained by "urine, perhaps by semen," (as I said before, a most unlikely thing in a healthy subject). Mr. Lyddon, Surgeon of Taunton, does not express any opinion; he merely states he had diarrhœa. There was no opportunity of Hodges having connexion with women while in gaol, therefore there could be no discharge of semen, unless it was involuntary or produced by masturbation.

I have been twenty-five years in the Profession: nineteen of that time I have been the Medical Officer of a large district of this Union (population 9000). Scarcely a week passes that I do not meet with cases of leucorrhœa in children produced from constitutional causes, so that I am not quite a novice in the diagnosis and treatment of the disease. I did not accuse the man of rape, but of giving the child gonorrhœa, for I was perfectly aware that it would have been impossible, from the size and age of the child, to have entered the vagina, and I am satisfied that gonorrhœa could be given by mere contact with the mucous membrane.

I was informed only yesterday, by a clergyman who has been living in this locality for nearly fifty years, that it is quite a common opinion among the lower class that if a person has the venereal disease it can be got rid of by having connexion with a young child.

I am quite satisfied that the accusation is just, and the sentence well deserved. I am, &c.

J. Hudson.

Shepton Mallett, April 5.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

Tuesday, April 2, 1861.

Dr. Copland, President, in the Chair.

Mr. Partridge exhibited specimens of

HYPERTROPHIED TOE-NAILS.

They had been removed after death from the great toes of an old woman who had died in a workhouse. They were each six inches long. Mr. Partridge stated that the structure of the nails was that simply of excessive growth, and he believed it to be due to a neglected state as to cleanliness. The nail glands were quite normal.

The President remarked that he thought the specimens were, as to size, almost unique.

Mr. Ashton observed that he had seen an instance in which the toe-nails had grown to such a length that they had curved upwards like a corkscrew. He believed it was merely from neglect.

Mr. Partridge asked as to whether in cases of elephantiasis there was usually any deformed growth of the toe-nails.

Dr. Gibb stated that he had seen a good deal of elephantiasis in the West Indies, and had never seen the nails involved.

Mr. Hutchinson said that he had seen four or five well characterised cases of elephantiasis in English persons, and in none were the nails altered in form.

Mr. Thompson confirmed the statements of Dr. Gibb and Mr. Hutchinson. He would suggest that the reason why in elephantiasis the nails were not affected was that they belong chiefly to the cuticle, whereas elephantiasis is a disease of the deeper parts of the skin.

Mr. Partridge next brought before the Society a specimen of

RUPTURED INTESTINE.

A boy was admitted into King's College Hospital having two

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hours before received in a fall a violent concussion of the abdomen. Obstinate vomiting was his chief symptom, and it was persistent up to the day of death, eight days after the injury. The diagnosis of ruptured bowel had been given. The vomited matter had been bilious, never stercoraceous. At the autopsy the upper eighteen inches of the jejunum were found greatly distended, and all the rest of the gut contracted. There was no effusion of intestinal contents. On pulling at the distended part of the bowel, an escape occurred. It was found that the gut had been completely torn through, but its opening had been closed by the contraction of its muscular fibres. The laceration was covered over with lymph. It was interesting as an instance in which natural processes had entirely prevented effusion after a large laceration had occurred.

Mr. PARTRIDGE next showed a specimen of

INTERNAL STRANGULATION OF INTESTINE BY THE APPENDIX VERMIFORMIS.

The lower part of the ileum had been strangulated by passing through a loop formed by adhesion of the appendix vermiformis to the mesentery. The preparation had been sent to Mr. Partridge for exhibition by Mr. Julius, of Richmond. The history of the case was, that the patient, a maid servant, had suffered for fifteen days from sickness and constipation. During the last few days the vomiting was incessant.

Mr. CANTON showed a specimen of

EXTRA-CAPSULAR FRACTURE OF THE NECK OF FEMUR.

It was interesting on account of the rapidity with which union had taken place in a very old person. The fracture was extra-capsular; the patient's age 82; the interval between the accident and the date of death, sixteen weeks. The union was complete.

Mr. CANTON also showed the

THIGH BONE

from the same patient, in order to prove what he had long known,—that the neck of the femur in aged persons does not become horizontal, as is usually held. He believed that the opinion on this point usually held was quite unfounded.

Mr. HOLMES related the termination of a case in which there had been

MORBID GROWTH IN THE TESTIS OF A CHILD.

The testis had been removed from a child of three years old a year ago, and was then shown at this Society. It was hoped that it was not malignant, as it was fibrous in structure and but very sparingly succulent. The disease, however, rapidly returned in the lumbar glands. The secondary growth was very rapid, and attained a very large size. The recurrence internally proved that the disease was malignant. Mr. Holmes adverted to an almost parallel case which he had in a former session brought before the Society.

Mr. HOLMES next brought forward a specimen showing

INTERNAL STRANGULATION OF THE BOWEL.

The patient was a man, aged about 60, who, whilst engaged in lifting a heavy weight, felt something give way within him. After eight days' constipation, without vomiting, he was brought into St. George's Hospital. When admitted, the rectum was empty, and the tube could not be passed far. Amussat's operation was performed, but without result, the colon being found empty. Vomiting set in after the operation. Death took place twelve days after the commencement of the symptoms. At the autopsy the obstruction was found to exist at the ileo-cæcal cacil valve. It consisted in a band, or ring, which passed round the calibre of the gut. The ring appeared to have been formed by the adhesion of two of the appendices epiploicæ.

Mr. PARTRIDGE asked if the obstruction was complete.

Mr. HOLMES said that it was practicable to force water through, but still the constriction was very decided, and had probably prevented the passage of all matters during life.

Dr. CRISP showed a specimen of

VILLOUS CANCER OF THE LARGE INTESTINE.

The patient, a woman, suffered from symptoms of obstruction for more than a month before death. She had had but little sickness, and very little constitutional disturbance. At the autopsy the intestines were found very little distended. On lifting the colon a portion of it gave way. On examination of the ruptured part a soft growth was found, which was demonstrated by the microscope to consist of villous cancer. The obstruction was at the junction of the colon with the rectum.

Mr. HOLMES asked why Dr. Crisp designated villous growths as cancer. He thought that a good deal of evidence had been accumulated in proof that the true villous tumours were not malignant.

Dr. HILLIER showed a specimen of

CONGENITAL MALFORMATION OF THE HEART.

The child had died at the age of 14 months, of tubercular peritonitis. During life a loud blowing systolic murmur had been audible on the left side. There was also a certain degree of lividity, and the diagnosis of cardiac malformation had been given. At the autopsy a very small opening was found passing through the ventricular septum. The foramen ovale had also a small central opening. The ductus arteriosus was closed, and the pulmonary artery of normal size.

Dr. HILLIER brought forward a specimen of

CONGENITAL HERNIA THROUGH THE DIAPHRAGM.

An aperture, an inch by an inch and a-quarter existed in the right wing of the diaphragm, which had admitted a large part of the colon into the cavity of the pleura. The subject of this curious deformity had lived to the seventh month. Symptoms of dyspnœa, etc., had commenced at the age of two weeks, and after this it had been found that the right chest was dull on percussion in the lower part, and tubular in the upper. The heart was displaced to the left side, and the child could never lie on the left chest. Attacks of dyspnœa were frequent up to the time of death. The opening was an oval one. The bowels were not in any degree strangulated. The infant had never had any intestinal symptoms. The lung was collapsed.

Dr. PEACOCK exhibited a specimen of

ANEURISM OF THE INFERIOR MESENTERIC ARTERY, ETC.

with a series of preparations illustrating the mode of formation of aneurism. The specimens were removed from the body of a man, 30 years of age, who died in St. Thomas's Hospital, after a short illness characterised by dyspnœa, cough, and expectoration—latterly of blood—palpitation, dropsy, etc. A murmur was heard, with the systole of the heart, most intensely, at the apex. The urine was albuminous. The heart was greatly hypertrophied and dilated, weighing 21 oz. avoirdupois. There was no valvular disease, but, from the dilatation of the left ventricle, the left auriculo-ventricular aperture was doubtless imperfectly closed by its valves. An aneurism about the size of a pullet's egg, with laminated coagula externally, but recent coagulum in the centre, existed in the inferior mesenteric artery; a second about the size of a chesnut was situated in the ascending aorta; and a third, not larger than a pea or bean, at the origin of the arteria innominata. By careful maceration and manipulation the lining membrane had been removed from the interior of the latter sacs entire, and the middle coat was found unduly vascular, adherent to the external coat and much atrophied. A coagulum containing softened fibrine filled the cavity of the larger of the two aneurisms, and a clot was also situated at the orifice of the smaller one. Dr. Peacock regarded the specimens as illustrating the origin of aneurisms in an acute process. The defect he supposed to commence with inflammatory action in the middle coat, and that the internal being deprived of proper support became protruded, constituting, when complete, the form described by systematic writer as "aneurisma herniosum." He had previously (see Vol. ii.) exhibited to the Society a series of preparations in which the disease also originated in morbid changes of the middle coat, and in which the internal coat was similarly protruded; but, in these cases, the change was of a chronic character, depending on atheromatous deposit.

Dr. PEACOCK also exhibited a specimen of a

SMALL ANEURISM AT THE BASE OF THE LEFT VENTRICLE, WITH CONTRACTION OF THE AORTIC AND LEFT AURICULO-VENTRICULAR ORIFICES.

This specimen was also removed from a patient in St. Thomas's Hospital, aged 27, who died with symptoms of

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cardiac disease during the autumn. The heart was very much enlarged, weighing 17 ounces avoirdupois; the right auricle and ventricle, and the left auricle were greatly dilated, and the left ventricle hypertrophied and dilated. The mitral orifice was contracted, only admitting the passage of a ball, measuring twenty-four French lines (natural size, forty-five F. l.), the aortic orifice was also contracted to the same dimensions (natural size, thirty-four, F. l.), and the several sets of valves were greatly thickened and indurated, and the folds of the aortic valves were adherent. This disease was, probably, either of intra-uterine origin, or commenced in early life. Beneath the united attachments of the left posterior semilunar segments there was a small opening leading into a sac, which would have held a nut or filbert. This small sac was situated on the outside of the aorta, and produced by its pressure a slight bulging into the aorta on the one side, and the left auricle on the other. Dr. Peacock stated that similar perforations of the base of the ventricle were not uncommon in cases in which there was very extensive and old obstructive disease at the aortic orifice. He had himself previously exhibited a similar specimen to the Society (Vol. iii.).

Mr. Nunn read the following Report by himself and Mr. Hulke, on

DR. DAVIS' SPECIMEN OF FIBROUS ULCER OF THE LEG.

"On dissection of the soft tissues no infiltration with cancerous deposit is discoverable; quite close to the margin of the ulcer, or rather sore, healthy tissue existed.

"On denuding the bones (portions of the tibia and fibula) an oval aperture, about two inches in the vertical diameter by one inch in the transverse, opened into the hollow of the shaft of the tibia, though the inner or subcutaneous surface, the edges are sharp. A cavity, the size and shape of a small hen's-egg, has been formed within the shaft of that bone, apparently by absorption, which cavity in the recent state was filled with the tumour to be described: the walls of the cavity are thin, had the life of the patient been prolonged, there is every reason to believe that perforation would have taken place through the posterior surface of the tibia; there is no tendency to rapid expansion, as it is called, of the bone. The fibula is united to the other bone by osseous material, the effect, doubtless, of the injury mentioned by Dr. Davis.

"The bed of the ulcer and the tumour contained within the tibia, consisted of a semitranslucent matrix, which in some parts showed traces of fibrillation and was throughout finely granular. This matrix was densely infiltrated with withered, opaque, granular, nucleated cells, and an abundance of spherical, oval, and fusiform nuclei, a few multipolar, some cells contained a couple or three nuclei, but most only a single one. We are disposed to consider the tumour a fibro-nucleated one,—one akin to fibro-plastic growths."

I beg to suggest that it ought to be called "polypus of the periosteum."

EPIDEMIOLOGICAL SOCIETY.

MONDAY, APRIL 8, 1861.

DR. BABINGTON, President, in the Chair.

THIS being the Annual Meeting of the Society, the Report of the Council was presented by Dr. McWilliam, and approved.

The following papers were read, viz.:—

1. "Observations on a Rare and Curious Tract on Plague, by Dr. Gilbert Skeyne, Physician to James VI." By J. N. Radcliffe, Esq.

2. "On the Climatology, Topography, and Diseases of Hong Kong, and the Canton River Station, by Dr. Smart, Deputy Inspector General R. N. Hospital, Bermuda." Read by Dr. McWilliam.

[Abstracts of these papers will be given in a future Number.]

The following were elected office-bearers of the Society for the Session 1861-2:—*President*—Benjamin Guy Babington, M.D., F.R.S. *Vice-Presidents*—Sir B. C. Brodie, Bart., President of the Royal Society; Edwin C. B. Chadwick; Rev. Thomas Dale, M.A., Canon Residentiary of St. Paul's; James Brown Gibson, M.D., C.B., Director-General of the Army and Ordnance Medical Department; R. D. Grainger, Esq., F.R.S.; Sir Charles Hastings, M.D., D.C.L.; Sir John Liddell, C.B., M.D., F.R.S., Director-General of the Medical Department of the Navy; Alexander Nisbett, M.D., R N., Honorary Physician to the Queen; John Nussey, Esq.; John Propert, Esq.; John Simon, Esq., F.R.S.; Sir Andrew Smith, M.D., F.R.S., K.C.B.; Thomas Southwood Smith, M.D.; Thomas Watson, M.D., F.R.S. *Treasurer*—Henry Mapleton, M.D., 5, Whitehall-place, S.W. *Secretary*—J. O. McWilliam, M.D., F.R.S., C.B., R.N., 14, Trinity-square, Tower-hill, E.C. *Foreign and Colonial Secretaries*—Belgium—A. Sayer, M.D., 28, Upper Seymour-street, Portman-square, W.; East Indies—James Bird, M.D., 27, Hyde-park-square, W.; Egypt and Syria—William Camps, M.D., 52, Park-street, Grosvenor-square, W.; France—Waller Lewis, M.B., F.G.S., Medical Officer, General Post-office, E.C.; Germany and Russia—Hermann Weber, M.D., 49, Finsbury-square, E.C., and W. E. Swaine, M.D., York; Portugal and the Brazils—J. O. McWilliam, M.D., F.R.S., C.B., R.N., 14, Trinity-square, Tower-hill, E.C.; Sweden, Norway, Denmark, and Iceland—R. Gordon Latham, M.D., F.R.S.; West Indies and North America—G. Milroy, M.D., 149, Strand, W.C. *Members of Council*—Dr. Aldis, F. J. Burge, Esq., A. Bryson, M.D., F.R.S., R.N., W. D. Chowne, M.D., Headlam Greenhow, M.D., Colonel Hough, Ernest Hart, F.R.C.S., C. F. J. Lord, Esq., J. F. Marson, Esq., Charles Murchison, M.D., Dr. Murphy, Dr. Nichol, W. Odling, M.D., J. N. Radcliffe, Esq., B. W. Richardson, M.D., Burdon Sanderson, M.D., E. C. Seaton, M.D., and Spencer Wells, F.R.C.S.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise on Thursday, April 4:—

Arnold, James Cotton, Blackburn
Evans, David Norman, Denbigh
Hall, Nathaniel Francis, Southwick, Sussex
Humpage, Benjamin Hill, Judd-street, Euston-road
Lees, Joseph, Wolverhampton
Schofield, Frank, Saddleworth, near Manchester.

The following gentlemen also on the same day passed their First Examination:—

Done, John, Victoria-road, Islington
Pettifer, Edmund Henry, Southgate-road, Islington
Poncia, Ferdinand Theodore, Balsall-heath, near Birmingham
Rew, James, Virginia-place, Boro'.

APPOINTMENT.

RAYNER.—Mr. John Rayner, L.R.C.S.E. and L.S.A., of Macclesfield, Cheshire, has been appointed Resident Surgeon to the Chorlton-upon-Medlock Dispensary, Manchester.

DEATHS.

BROACKES.—April 7, at Hawke House, Sunbury, Middlesex, William Broackes, M.D.

DYER.—February 18, in the Garrison at the Cape of Good Hope, George Henry Dyer, M.R.C.S. Eng., L.S.A. Lond., Staff Assistant-Surgeon, Army.

JAMES.—April 4, Hugh James, of Burgh-by-Sands, Cumberland, L.S.A., aged 49.

JENKINS.—April 1, at Manaton Rectory, Devonshire, John Jenkins, late of Gosport, Hants, L.R.C.P. Edin., M.R.C.S. Eng., aged 72.

KENNEDY.—April 5, at the Lying-in Hospital, Great Britain-street, Dublin, Dr. William Kennedy, one of the Assistant Masters of the Hospital.

MANTELL.—April 6, at Shrivenham, Berks, Henry Axford Mantell, aged 35.

MILLAR.—April 4, at the Royal Marine Barracks, Plymouth, Andrew Millar, M.D., Staff-Surgeon, R.N. (seniority 1833).

MARSHALL.—March 2, at No. 5, Circus-road, St. John's-wood, Thornton Marshall, late Surgeon 65th Regiment, aged 38.

NICHOLLS.—April 5, John Nicholls, of No. 49, Dawson-street, Dublin, L.A.H. Dub., aged 70.

WILLIS.—April 1, John Willis, of West End House, Havant, Hants, M.R.C.S. Eng., L.S.A., Admiralty Surgeon and Agent at Hayling Island, Hants, aged 54.

WORKMAN.—April 3, after a few days' illness, at his father's residence, Castle-street, Reading, William Workman, M.R.C.S. Eng., L.S.A. Lond., late Senior House-Surgeon to the Northern Hospital, Liverpool, aged 23.

LONDON FEVER HOSPITAL.—Dr. Murchison, late one of the Assistant-Physicians at the Fever Hospital, has been elected to fill the vacancy caused by the resignation of Dr.

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Tweedie, for many years Senior Physician to the Hospital. At the adjourned annual meeting of Governors, which took place in March last, a highly complimentary resolution was passed, thanking Dr. Tweedie for his valuable services, extending over a period of thirty-eight years, and soliciting his acceptance of the post of Consulting Physician to the Hospital, which he signified his willingness to do. Dr. Tweedie was also elected a Vice-President of the Institution. There are now two Assistant-Physicianships vacant.

ADDRESS TO DR. JOSEPH BELL.—An address, signed by 97 students attending the Glasgow Royal Infirmary, was presented to Dr. Bell, at the close of his pathological lecture, on Saturday last. There was an unusually large attendance. The address is as follows: "To Joseph Bell, Esq., M.D., Senior Physician to the Glasgow Royal Infirmary.—Sir, We, the undersigned, students attending the Royal Infirmary of Glasgow, cannot allow the session of 1860-61 to close, without, in this formal manner, recording our gratitude to you for your zealous and unremitting endeavours to impart instruction to us at the bedside and in the lecture-room. We feel bound to do so, inasmuch as, throughout the past session, in addition to your prescribed duties, you have given a course of pathological demonstrations of the highest interest, which cannot but prove of great value to us in our Professional career. With the warmest wishes for your continued prosperity and success, we are," etc.

OPENING DISEASED JOINTS.—Dr. Cooper, Professor of Anatomy and Surgery at San Francisco, advances the following propositions:—"1st. That atmosphere admitted into the joints or other tissues is not a source of irritation or injury, excepting where it acts mechanically; as when admitted into a vein by producing asphyxia, into the thoracic cavity by its pressure producing collapse of the lungs, or when, by the long-continued exposure of a large amount of surface of any of the internal organs whose normal temperature is much above that of the atmosphere, it reduces it so as to produce a morbid action. 2nd. That the division of entire ligaments about the joints is not only no impediment to their ultimate strength but facilitates the cure by enabling the Surgeon to open the affected part fully, for the purpose of applying Medical substances to the articular surfaces when these are ulcerated or otherwise diseased. 3rd. That the only true mode of treating ulcerations of bone, however slight, within a joint, is to lay it open freely and apply remedial agents directly to the part affected. 4th. That opening the joints early in cases of matter burrowing in them is far more imperiously demanded than the opening of other parts thus affected, and the operation produces no further pain or inconvenience to the patient, in any respect, than when performed upon parts remote from the joints. 5th. That after opening a large joint, the knee, for instance, by an incision several inches long, the wound should be kept open by the introduction of lint or other similar substances until the parts within the articulation become healthy, and in all cases it should be made to heal by granulation. 6th. That extensive wounds opening freely the large joints, such as the knee (even when lacerated as by a saw, which must necessarily heal by granulation), do not as often give rise to violent symptoms as very small wounds, such as are made by the corner of a hatchet, an adze, or a penknife, which heal on the outside by first intention. 7th. That there are no known limits beyond which a tendon or ligament will not be reproduced after division, provided the parts are made to heal by granulation, and that the present acknowledged rule of two inches being the maximum distance in which the divided ends of a ligament or tendon can safely be separated, has not the least foundation in fact."—*Atlanta Medical and Surgical Journal*, January, 1861.

AT the Ethnological Society, last week, a paper was read by Mr. Mackintosh, giving the results of ethnological observations made during the last ten years in England and Wales. He maintains that there are distinctive physical characters in the inhabitants of different parts of England which indicate whether they are of Saxon, British, or Scandinavian origin. From the results of his observations it appeared that in the county of Kent, in which he commenced the tour of England, the majority of the inhabitants are not of Saxon origin, but are descended from the natives of Friesland, whom he called Frisians, who are characterised by fair complexions, oval faces, prominent features, long necks, and narrow chests. In the southern part of Kent, particularly, these characteristics of the inhabitants are observable. In Hampshire the Saxons are most numerous; and in Dorsetshire there is a nearly equal mixture of Saxons and Gaels; and the same races, with a mixture of Flemings, are perceptible in Somersetshire and in Devonshire. The Cornish men are mostly Gaels, and the difference between their expanded chests and the contracted chests of the men of Kent was stated to be remarkably conspicuous in the space occupied by Kentish and Cornish militia, the same number of the latter occupying considerably more ground than the former. The people who inhabit the Midland districts of England were said to present nearly the same characteristics as those of South Wales, from which it is inferred that they are of British, and not Teutonic origin. The Scandinavian peculiarities are observable in Cumberland, mingled with the British; and the Cumbrians were stated to be larger men than the average of those in England. The fair complexions and red hair of the Scandinavians are conspicuous in East Yorkshire, in Lincolnshire, and in Norfolk, but they are not so general in Northumberland as had been supposed. In London and Middlesex, Mr. Mackintosh observed, the varieties of races are so mingled that it would require a separate paper for their development. In the discussion that took place after the reading of the paper, Dr. Knox and others expressed their assent, while Mr. Burke insisted that as great a diversity exists among the individuals of each separate race, as Mr. Mackintosh contends for as the result of diversity of race.

VITAL STATISTICS OF LONDON.

Week ending Saturday, April 6, 1861.

BIRTHS.

Births of Boys, 1012; Girls, 988; Total, 2000.
Average of 10 corresponding weeks, 1851-60, 1941·3.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	627	593	1220
Average of the ten years 1851-60	615·9	587·0	1202·9
Average corrected to increased population ..	..	..	1333
Deaths of people above 90	1	..	1
Deaths in 15 General Hospitals	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1851.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	376,427	..	4	3	..	8	5	1
North ..	490,396	1	8	2	3	16	4	1
Central ..	393,256	..	7	2	3	14	4	2
East	485,522	2	..	7	3	27	5	..
South ..	616,635	1	3	5	6	18	7	3
Total	2,362,236	4	24	19	15	82	25	7

BOOKS RECEIVED.

Diphtheria. By W. Jenner, M.D. London: 1861.

The Genetic Cycle in Organic Nature. By G. Ogilvie, M.D. Aberdeen: 1861.

The Eastern or Turkish Bath. By Erasmus Wilson. F.R.S. London: 1861.

The Threshold of Chemistry. By C. W. Heaton, F.C.S. London: 1861.

Caillault on Diseases of the Skin in Children. By R. H. Blake, M.R.C.S. London: 1861.

Imperfect Digestion. Second Edition. By A. Leared, M.D. London: 1861.

A Short Practical Treatise on Cancer. By John Pattison, M.D. London: 1861.

Letters from Abroad. By W. Bullar, M.D. London: 1861.

Ale, Wine, Spirits, and Tobacco. By John Barclay, M.D. London: 1861.

The Anatomist's Vade-Mecum. By Erasmus Wilson. Eighth Edition. London: 1861.

Ten Lectures Introductory to the Study of Fever. By A. Anderson, M.D. London: 1861.

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The Physical Examination of the Chest. By S. Scott Alison, M.D. London: 1861.

Elements of Medical Zoology. By A. Moquin-Tandon. Translated by R. T. Hulme, M.R.C.S. London: 1861.

Cholera. By J. M. Honigberger. Calcutta: 1861.

Bemerkungen über das alt-römische Bad. Dessau: 1861.

The Medical Profession: its Aims and its Objects. London: 1861.

The Stomach and its Ailments. By W. S. Oke, M.D. London: 1861.

The Uses and Abuses of the Turkish Bath. By E. Haughton, M.D. London: 1861.

Lectures on Paralysis of the Lower Extremities. By C. E. Brown-Séquard, M.D. London: 1861.

Medical Times and Gazette.

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NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Professor Laycock's Lecture on Pneumonia will appear in an early number.

Dr. Risdon Bennett's Paper on the Hypophosphites shall appear as soon as possible.

Papers and Letters by Dr. Jago, Mr. Skinner, Mr. Wildbore, Dr. Schofield, etc, etc., are in type.

Dr. West's Second Lecture on Cerebral Symptoms will appear next week.

W. P.—Ramsbotham's Midwifery, West on Diseases of Women, West on Diseases of Children.

Dr. Ch. Le Maout, of Brieuc, has sent us a long letter, the object of which is to show that the firing of cannon and bell-ringing are the causes of storms, thunder-bolts, rain, hail, snow, shipwrecks, earthquakes, famine, drought, inundations; the diseases which have attacked the vine, the potato, the hop, and the silkworm; hooping cough, "epidemic constitutions," etc. Our readers will, no doubt, be satisfied with this sketch of his letter, and with the concluding hope of the writer that, "sooner or later, princes, enlightened by facts which are daily revealed to them, will concert together to regulate the custom of cannon-firing and bell-ringing, which, when carried to such extremes, are evidently the cause of all the desolating ravages produced by atmospheric disturbances."

Caution to Authors.—For several years a certain Doctor preyed on Authors in the following manner. On the appearance of a new work, the author received a note requesting a presentation copy, on the plea of the writer's connexion with the press, ensuring favourable notices. In too many instances the application was responded to. No review ever appeared, and the book soon found its way to the book-stall for any small sum it would fetch. The press exposed this Doctor's mode of swindling, and it was brought to an end. An imitator has, however, taken the field, dating his letters from Manchester. He applies for a copy or copies of new works, promising to return the price per Post-Office Order. This swindler is now in full operation. In one case, he addressed the Author for two copies. The latter in his simplicity sent them, but never received any Post-Office Order in return. We trust this notice will tend to stop this swindler's further progress, at least as far as Medical Authors are concerned.

The College Lists.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I beg to call your attention to the fact that the names of those gentlemen who passed their Primary Examination at the College of Surgeons on the 26th, 27th, and 28th ult., have not yet appeared in the *Medical Times and Gazette*, while those who passed on the 2nd, 3rd, and 4th of this month have been already inserted, which might induce persons to believe that the former gentlemen had not yet presented themselves for examination. I am, &c. R. G. F.

[The College does not send lists of the gentlemen who pass to the Medical Journals, or such omissions would not occur.]

Poor-Law Salaries.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Along with many of my Medical brethren, I am opposed to the payment of Poor-law Medical Officers by fees or mileage alone, and am surprised that it has never entered the mind of the "Poor-law Medical Reformers" to devise, as a basis, the payment of the same salary for the Medical portion of the Contract as is now given to the Relieving Officer for exactly the same district and population; and I, therefore, beg to suggest, as a means of settling the agitated question of "Poor-law Medical Reform," that a return of the Medical portion of the salaries of the Medical Officers, and the salaries of the Relieving Officers of each district be laid before the House of Commons or some Committee.

The writer believes this is the proper basis to go before the Ratepayers, the Commons, and the Boards of Guardians, and will meet the common-sense wants of the case.

Of course, vaccination, midwifery, and all surgery (including burns, scalds, and the use of the catheter,) ought to be allowed as extras, together with a fee for certificates of death in pauper cases.

If this suggestion was acted upon, many of the salaries of the Medical Officers for the Medical Contract in this district, to my knowledge, would be doubled, and as this raises the question of the amount of duty exacted I leave the Medical Committee to say whether the responsibility, the visiting of the sick by night and day, and the danger is not greater to the Medical Officer than the Relieving Officer, and worthy, at least (including medicines), of the same remuneration. I am, &c.

East Lancashire, April 5. B. M. O. B. U.

COMMUNICATIONS have been received from:—

Professor Simpson; Dr. West; Dr. Wilde; Professor Laycock; Dr. Risdon Bennett; Dr. Jago; Dr. Haughton; Mr. Clay, Birmingham; Dr. Wadham: Dr. McWilliam; Dr. Le Maout; Registrar-General; Dr. Baines; Mr. Witten; Mr. Huxley; Dr. Mawel; Mr. Bruce; Mr. Murray; Mr. Bertram; Mr. Dolby; Mr. E. Watts; Mr. Kempton; Mr. Slatter; Mr. Workman; Mr. Bolton; and our Correspondents at Berne, Constantinople, Vienna, Berlin, Breslau, Paris, etc.

APPOINTMENTS FOR THE WEEK.

April 13. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

Royal Institution, 3 p.m. Max Muller, Esq., "On the History of Language."

15. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

Royal College of Physicians, 8½ p.m. Dr. Beale's "Lecture on the Structure of the Tissues of the Human Body."

Medical Society of London, 8½ p.m. Mr. P. C. Price "On Congenital Phymosis; considered as a Frequent Cause of Irritation of the Urinary Organs of Young Children: the Importance of its Early Recognition and Removal."

16. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

Royal Institution, 3 p.m. Professor Owen "On Fishes."

Pathological Society, 8 p.m. Meeting.

17. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

18. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.

Royal Institution, 3 p.m. Professor Tyndall "On Electricity."

Harveian Society of London, 8 p.m. A Paper by Edwin Sercombe, Esq.

19. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

Royal Institution, 8 p.m. John Ruskin, Esq., "On Tree Twigs."

Western Medical and Surgical Society of London. Council Meeting, 7 p.m. Nomination of Officers for 1861, 1862; Dr. Sansom "On Death from Chloroform," 8 p.m.

EXPECTED OPERATIONS.

Westminster Hospital.—The following Operations will be performed on Tuesday next, at 2 o'clock:—

By Mr. Holt—Amputation of Breast; Nævus of Face.
By Mr. Holthouse—For Necrosis of Humerus.

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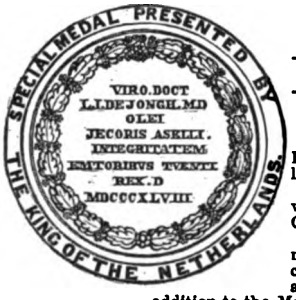

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ORIGINAL LECTURES.

ON CEREBRAL DISEASE UNATTENDED BY CEREBRAL SYMPTOMS.

DELIVERED AT THE

Hospital for Sick Children.

FEBRUARY 16, 1861,

By CHARLES WEST, M.D.

Physician to the Hospital for Sick Children.

Summary: Majority of such Cases Incurable, but their Diagnostic Importance great—Cases of Hydrocephalus with absence of characteristic Premonitory Symptoms—Great Value to be attached to any one Symptom, if Persistent, though unattended by others, as persistent Constipation, Sickness, Head-ache, or Drowsiness—Occasional rapid Advance of Hydrocephalus in Phthisical Subjects—Gravity of slight Symptoms at certain Epochs of Infantile Development—Symptoms sometimes Obscure in Cases of Chronic Tubercular Disease of the Brain—Cases in Illustration—Conclusion.

GENTLEMEN,—On two former occasions I have called your attention to cases in which the symptoms ordinarily indicative of Disease of the Brain existed as the result of mere passing disturbance of that organ, and did my best to help you to distinguish between the apparent and the real; and thereby, I trust, to remove groundless apprehensions, and to bring most welcome hopes to your patients' friends.

To-day I propose to show you the other side of the picture, and to bring before you some instances in which the existence of disease of the brain was masked by the absence of its more usual symptoms, or rather by the delay of their appearance. These cases are all the more important since, though they are for the most part of a kind that does not admit of cure, slight indications still forewarn the experienced eye of the coming danger; while the absence of the customary signs of evil lull the untaught Physician into a vain security, from which he is not roused until Death is actually on the threshold.

A few weeks since a little boy, 3½ years old, was brought into this Hospital in a state of unconsciousness, from which he could not be roused. His eyes were wide open, and rolled vacantly around, or were stirred by a frequent twitching movement towards the right side, while the pupils were widely dilated, and insensible to light. The left arm and leg were palsied, the boy could not move them; if lifted they fell again as if dead; power still existed in the right side, with which involuntary movements were made; but the sense of feeling was gone; and though the limbs were pinched, no attempt was made to move them. The jaws were firmly clenched, but deglutition was performed, though with difficulty, if the spoon was forced between the teeth. With this the pulse was extremely feeble; and it was evident at once that there existed incurable disease of the brain—that the child had come into the Hospital to die.

On the next day breathing was very irregular; fluid put into the mouth ran out at the corners, and the act of swallowing was worse performed than on the previous day, while the pulse was now so feeble as to be a mere thread, and so frequent as to be almost uncountable. It is scarcely worth while to follow the process of dying, which went on from January 22 to January 25, with such changes only as served to announce the gradual advance of the abolition of all nervous power, till at length the child ceased to breathe.

There was considerable congestion of the vessels of the arachnoid, and this by no means so marked at the back as towards the front part of the brain; consequently in no measure the result of position. The convolutions of the brain were much flattened, and the ventricles were distended by four ounces of clear serum. The lining of the ventricles was somewhat thickened and tough, and presented a finely granular appearance, which showed that inflammatory mischief had for some time been going on in the central parts of the brain. The anterior cornua of the ventricles were not softened, but there was much softening of the brain-substance about and around the posterior cornua. There were some minute tubercular granulations of the arachnoid on the convexity of the brain, and as is usual a similar much more abundant deposit intermixed with hyaline matter about the optic commissures, and extending along the fissure of Sylvius. The lungs were beset throughout with very minute, transparent grey granulations, equally abundant and in the same early stage throughout. The bronchial glands were much enlarged, and many of them were converted into yellow tubercle. Tubercle was deposited in the pleura, peritoneum, liver, spleen, and slightly in the mesenteric glands.

But why do I relate this case, which thus far presents nothing specially to distinguish it from other cases of tubercular hydrocephalus; coming under observation when the disease is advanced, and when the Doctor can do nothing but stand by and watch the gradual approach of death? I relate it on account of the previous history of the child, on account of the small suspicion which the mother appears to have entertained that the early symptoms of her little one's illness had so grave a meaning as time showed to be their real import. The little boy was delicate, and of late his father had been out of work, and so he had fared badly. On January 7 he was rather feverish, his appetite failed, his face flushed frequently, and his bowels were constipated, and for four days they continued so; when at length they were relieved by castor oil; though for fourteen days the bowels acted only three times. Active aperients, however, do not seem to have been tried. There was no sickness, nor was there any complaint of pain in the head nor any indication of its suffering, and the convulsions which occurred on January 17, and which continued at intervals, scarcely indeed at any time completely ceasing, first aroused the mother's serious alarm. On the 19th the convulsions ceased, and left the child in that unconscious state in which he was admitted on the 22nd; only to die in the Hospital on January 26.

It is well to have impressed upon your minds the characteristic features of certain diseases,—to know, for instance, that sickness and vomiting, and pain in the head and restless nights, that altered temper, and causeless fretfulness, and intolerance of light and sound, dizziness, and heat of head, are the usual signs of water on the brain. It is well, however, to be aware also that any one, or almost all indeed, of these symptoms may be absent, and yet the disease may be quietly advancing; and that the steady persistence of any one symptom of cerebral disease, unrelieved by ordinary remedies, and especially when coming on in a patient disposed either by hereditary tendency or by unfavourable hygienic conditions to disease, should always kindle in your minds apprehensions which yet it may not always be judicious to express. Loss of appetite, transient flushings of the face, and constipation, are symptoms which an untaught woman may well be excused for not regarding with grave solicitude. But it cannot be too deeply impressed on your minds that in every doubtful case you are bound distinctly to raise to yourselves the issue of the presence or absence of cerebral disease, and that the longer any one symptom commonly associated with disease of the brain persists, the greater is the probability that that symptom depends on organic disease, not on mere eccentric irritation. This rule, indeed, is but a natural corollary from what I have stated in former Lectures, that the intermittence of symptoms which are in themselves most formidable, goes far to prove that in the particular instance their meaning is not so grave as we might at first imagine.

Constipation seems, in the above related case, to have been the one persistent symptom, which, though it failed to excite the suspicion of the mother, ought not, in similar circumstances, to fail to awaken yours. The symptom may vary, but, be it what it may, its steady persistence attaches to it a gravity which it would be hard to over-estimate.

A little boy, 5 years old, whose maternal grandfather died of phthisis, was in good health until the middle of July, 1843. He was then attacked by diarrhœa and violent sickness. The diarrhœa ceased under treatment at the end of five weeks, but the sickness continued unabated. On September 11 he was seen by a Physician, who ordered a blister to the epigastrium, where he complained of pain, apparently brought on by the frequent retching; and who also gave him an emetic, on the assumption, I suppose, of the existence of gastric disorder, and a mild aperient to relieve the bowels, which since the cessation of the diarrhœa had become a little constipated. On September 13 I saw him for the first time. At the time of my visit he was lying in bed, dozing, not sleeping, with his face turned from the light; but, on being roused, he was perfectly cheerful, and said he had no pain

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at all in his head; though I heard he had once or twice complained of headache on the day before. His pulse was very frequent; I suspected that it was irregular; but could not quite satisfy myself of it, and in the absence of any marked symptom of disease of the brain contented myself with prescribing some hydrocyanic acid. Of this medicine he took three doses; during the former part of the night he slept well, he then became restless, and had a fit at eight o'clock in the morning, succeeded by another slighter one at eleven. At half-past twelve I saw him; he was quite sensible, lying on his side, with his eyes closed, and said he was "so sleepy;" but though he appeared to doze he had no real sleep. His head was not hot, his eyes were not suffused, his pupils were natural, his manner perfectly self-possessed; but his pulse, the day before so frequent, had sunk to sixty. It was feeble, somewhat unequal in force, and very irregular in rhythm, there being a distinct intermission at every sixth beat. Local depletion relieved the head; but the fits returned after a few hours, gradually increasing in severity, duration, and frequency, and a gradually deepening drowsiness affected him in the intervals. The bowels were by no means obstinately constipated, and the child was brought speedily under the influence of mercury; but no effect was thereby produced. The coma became more profound, and at length convulsions came on, in which he died on September 21, eight days after I first saw him.

There was a considerable quantity of fluid in the ventricles, considerable congestion of the cerebral substance, and slight softening of the central parts of the brain, with a few tubercular granulations of the membranes at the base of the brain, and minute grey granulations abounded through the pulmonary substance. The appearances, in short, were abundantly characteristic of tubercular hydrocephalus, but not of the disease in its most extreme degree; and I think that I may add that in many instances, where the disease steals on imperceptibly in its early stages, it does not leave behind the same extensive disorganisation which we commonly meet with when it has run its course with well-marked symptoms from the commencement.

This case is remarkable, partly for the supervention of the disease upon previous diarrhœa, which, indeed, had subsided, but left the bowels easily acted on by medicine; partly for the complete absence of all ordinary symptoms of cerebral disease when he was seen by the experienced Physician who first prescribed for him on September 11th, and who made an express memorandum with reference to him, Cerebri affectio nulla, on the paper on which he prescribed for him. Three other points this case may impress upon your minds. The grave import of vomiting in childhood when persistent, and when not accompanied by other very marked signs of gastric and intestinal disorder. The extreme probability that great frequency of the pulse (except when the result of exhaustion) unaccompanied by corresponding heat of skin and manifest febrile disturbance depends on mischief going on in the brain. The almost absolute certainty that such is the case which may be deduced from any, even the slightest irregularity in the rhythm of the pulse or inequality in the force of the beats; and the positive proof that it is so which is furnished by any sudden and considerable diminution of its previous frequency, as for example when it falls (as in the just related instance) from 120 to 60 in less than twenty-four hours.

Constipation alone, sickness alone,—in like manner headache alone,—may be the one sign of the coming danger. A boy, 6½ years old, one of six children of healthy parents, though one infant had died of hydrocephalus, had a slight feverish attack in the month of September, during which he was reported to have been light-headed one or two nights. He regained his usual health in about a fortnight, though his appetite continued rather dainty, and he scarcely had his usual strength or spirits. So little cause for anxiety did there seem, however, that his mother was about to take him out of town at the end of November, but brought him to me first, more as a matter of precaution than from any serious anxiety about his health. One symptom, however, was mentioned at this interview, on November 29, namely, the existence for some weeks of a constant, dull, frontal head-ache. It was not a violent pain like the purely neuralgic head-ache, nor was it accompanied with sickness, like the head-ache I referred to in my last Lecture, which, continuing severe and with much disorder of the stomach for some twelve or twenty-four hours, then leaves the child almost or quite as cheerful as ever, though for a few days, perhaps, somewhat weaker. This pain was present constantly. It did not, indeed, interfere with sleep; the child slept tolerably well; but the pain awoke with him in the morning and continued all day long. He did not always complain of it, as quiet amusements which interested him seemed to make him for a time forget it, but he never lost it entirely. His head was not then hot, nor was his pulse irregular; he had not vomited, his bowels were not very confined; but there was simple pain of the head. That pain was persistent, and had followed an indefinite febrile attack which had been attended by cerebral disturbance, and had left behind a degree of impaired appetite and strength, outlasting the time to which one might have expected the influence of a comparatively trivial ailment to extend. Always suspect the import of vague febrile attacks in childhood, coming on causelessly, lasting an indefinite time, unattended by grave functional disturbance of any special set of organs, a condition more of ailing than of illness, which keeps you on the alert more because you do not see clearly what it is to issue in than because on any one visit you observe cause for serious anxiety. Such attacks, in nine cases out of ten, are the results of tubercular deposit, are, I believe, the outward signs of the active progress of the tuberculous cachexia; and when in the course of such attacks, or after their occurrence, symptoms appear indicative of disorder of any kind in the head, the chest, the abdomen, such disorder is almost invariably due to their disturbance by tubercular deposit in the brain, the lungs, the intestines, or peritoneum.

The boy did not go into the country, for I felt uneasy about him. On December 3 I saw him again; his condition was much the same, he was no better, was not much worse; but he was rather fond of sitting by the side of the sofa, and burying his head in his mother's lap, or in the sofa pillow, while he dozed a few minutes; but still he was intelligent, moderately cheerful, and capable of being amused. On the 8th the pulse was slightly irregular; and now the drowsiness deepened, and by degrees took the place of the pain. On the 19th he died, having been convulsed, though but slightly, two two days before his death, and having at no time presented the marked characteristics of tubercular hydrocephalus. Effusion into the ventricles, central softening of the brain, and granulations of the arachnoid, were present; all in sufficient degree to mark the disease to the eye of the morbid anatomist, though like the symptoms during life, not in such measure as would have led one to select the case for the ordinary purposes of clinical illustration.

Let me add another case which occurred here but a few days since, and which illustrates a different phase of the early stage of the disease. A few days since, going round the ward, I came to a case which had been admitted two days previously. It was a little girl, 4 years old, previously in good health, who on January 30 had been attacked by causeless vomiting, accompanied by thirst and fever, but by no pain. When brought to the Hospital, on February 6, the extremely acute and intelligent House-Surgeon was so impressed by these symptoms, that he regarded the case as one in which scarlatina was probably about to appear, and very properly had the little one placed in the fever ward. No rash was perceptible, and the next day and the next none appeared. She lay quiet, and dozed much by day; but she vomited only thrice after admission. On the night of February 7 she was restless and thirsty, and on February 8 I saw her for the first time. It was then obvious that the case was not one of scarlatina, for the following reasons: the vomiting which ushers in scarlet fever is succeeded almost invariably in the course of twenty-four or, at latest, thirty-six hours, by the appearance of the characteristic rash. In this case no sign of rash was apparent at the end of seven days. The vomiting of scarlet fever is usually of short duration, the exception being furnished by occasional instances of the malignant form of the disease; but of malignant fever there was no question here. If vomiting continues, the intestinal disorder almost invariably occasions diarrhœa; in this case, on the contrary, the bowels were constipated. Mere drowsiness is not a common attendant on scarlet fever, but if there is much cerebral disturbance, it takes the form of delirium, or of excitement alternating with the semi-consciousness of fever, and which differs widely from the placid sleepiness of the child with cerebral disease. This child lay in bed, curled

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up in an attitude of perfect calm, and did not resent being disturbed or being lifted out of bed. Her pupils were unnaturally dilated and acted but imperfectly under the stimulus of light, and there was very slight inward strabismus of the right eye. There was but slight heat of head, there was no undue pulsation of the carotids, there was no grinding of the teeth, no difficulty in deglutition. Time passed on, but with no marked sign of increased mischief, only the gradual deepening of the drowsiness into a coma so profound, that the child could not be roused, and the slow increase of the difficulty in deglutition, till at last it became impossible. On the fifteenth day the little one died, no convulsions disturbed its repose, or distorted its features, but it just passed away.

I do not dwell on the morbid appearances. They consisted of the effusion into the ventricles, the granulations of the arachnoid, the deposit of lymph at the base of the brain,—in short, of the ordinary appearances, characteristic of tubercular hydrocephalus.

At the risk even of what may seem almost tedious iteration, I must once more warn you against the extreme risk of overlooking the advances of cerebral disease in phthisical or tubercular subjects. The headache in one of the cases I have related forced itself upon notice, but it is by no means always that any one symptom points, as the pain did in that instance, to the seat of mischief. Solicitude has perhaps existed for some time with reference to the child's health; slight cough is present, and with it there is some loss of flesh. Presently the cough increases a little, and the parents attribute this to the child somehow having caught fresh cold. There is no marked head-affection, the child indeed is heavy and dull, but makes no special complaint of headache, or says at the most that his head hurts him when he coughs. The bowels are often somewhat constipated, but probably a disposition to constipation is habitual, while if vomiting occurs once or twice it is referred to the expectorants prescribed for the cough, and ceases either spontaneously, or as the result of some change in treatment. But still the patient is no better; the pulse continues rapid and feeble, the heaviness and dulness deepen into a constant drowsiness, the drowsiness into a stupor, and the stupor issues in coma which may or may not be preceeded by convulsion; the riddle of diagnosis being solved by the evident head-symptoms which accompany the last few days or hours of the patient's life.

A girl, 7 years and 9 months old, who inherited a phthisical tendency from her maternal ancestors, was attacked by hooping-cough four months before she came under my notice. In the course of a week measles supervened which were complicated with severe diarrhœa; while the hooping-cough lasted, though with no great severity, for four months. A month after its cessation the child, who still had some cough, was admitted into the Children's Hospital. She was very weak, much emaciated, had various dyspeptic symptoms, and presented all the characters of advanced phthisis, while there were evidences of tubercular deposit in the left lung. Her pulse was a hundred in frequency and very feeble; her tongue was much coated, her lips were dry, and she resembled not a little a patient with typhoid fever: between which disease and acute tuberculosis, I may just remind you in passing, the diagnosis is often by no means easy. She slept well the night after her admission, and made no complaint of headache, but in the morning she was sick once, a symptom which had occurred before, but which at no time was frequent or troublesome. On the following day she made slight complaint of headache, but her face was tranquil, and though not sleeping much by day she was always quiet. Her pupils on this day were observed to be rather more dilated and rather more sluggish than they ought to have been. Sickness had not returned, nor did it; but the complete distaste for all food and drink was very remarkable. On the fourth day all headache had disappeared, but drowsiness seemed creeping on; it deepened into coma on the sixth day; undisturbed, save by very slight twitching of the muscles of the face, and on the eighth day the child died.

The emaciation was extreme, and there was abundant tubercular deposit in almost all the organs of the body, especially in the bronchial glands and spleen. There were traces of old mischief at the base of the brain in the form of loss of transparency of the membranes, and some deposit of tubercular granulations along the fissure of Sylvius. The ventricles did not contain above six drachms of fluid, and there was no softening of the central parts of the brain, while the congestion of the arachnoid was not considerable. In short, the post-mortem appearances harmonized with the symptoms during life in illustrating the fact that whenever the tuberculous cachexia is much developed, a very small amount of cerebral disease is quite sufficient to destroy the patient; and the slight symptoms during life will be found to be the expression of a very small amount of local mischief.

The younger the child, too, the smaller will usually be the amount, both of general and local disease that will suffice for its destruction. There are also certain epochs of infantile life at which unusual demands are made on constitutional vigour, and at which, therefore, more than ordinary watchfulness is called for, and symptoms have a more than ordinarily grave significance; such are the epochs of weaning, and of dentition; and one of the reasons for somewhat protracted suckling of a weakly infant is to prevent the coincidence of the irritation of teething with the constitutional disorder that too often accompanies the first attempt at the substitution of artificial food for the mother's or nurse's milk.

It is at this time that slight attacks of illness are apt to pass unnoticed, or to be referred for an easy solution of their meaning either to the change of diet, or to the irritation of teething. The child becomes fretful, sometimes feverish, generally restless at night, but still there are intervals of almost its wonted cheerfulness. There is no marked intolerance of light,—a symptom, by-the-bye, the existence of which it is not easy to ascertain in the infant; constipation is seldom obstinate, often does not exist at all, while loss of appetite and refusal of its usual food are often even more marked than actual vomiting. For days, sometimes even for weeks, these symptoms continue, affording nothing definite enough for treatment, scarcely definite enough to call for grave solicitude. At length, with no apparent cause, there sets in an increase of the fever, attended by considerable heat of head and frequent outcries. These last for a variable time, for two or three days, or less, or sometimes even only for a single night, and the next day brings quiet; the child is drowsy after its suffering of the day before, so it seems at least, and the drowsiness deepens, and then coma steals on so almost imperceptibly that the anxious mother clings to the confident expectation of her little one's recovery for days after the doctor has seen the certain issue of the disease in death. Now and then, too, the acute stage of excitement and pain and fever is altogether wanting, and the transition from mere discomfort, first to apparent ease, and then to drowsiness, then to sleep, and from sleep to stupor, from stupor to death is so gentle, that not the friends only, but the doctor, too, are apt to be taken by surprise.

And how is such surprise to be avoided? Partly by bearing in mind that the ill-marked febrile disorders—the fretfulness, the unrest, all the assemblage of indefinite symptoms which I have mentioned—is commonly indicative of the advance of tubercular deposit, or, at any rate, accompanies that state of health in which deposit of tubercle is most apt to take place. Next, by remembering that in the infant at the period of dentition, there is a special source of irritation of the nervous system which tends to render the brain most sensitive, and its functions most likely to become disordered. Lastly, that this being the case, any signs of constitutional disturbance not clearly traceable to some other cause are most likely due to disease of the brain, and that consequently, on every occasion, you are bound to disprove the existence of cerebral disease before you are at liberty to seek further for an explanation of the symptoms.

But it is not in comparatively acute cases only that you are liable to fall into error, owing to the absence of those pathognomonic symptoms, which usually you expect to meet with. The course of chronic disease may also be obscured in a similar manner, and this even when the appearances disclosed after death are such as to make it seem almost impossible that disease so grave should not have announced its presence most emphatically by symptoms of corresponding intensity.

Not many months ago a boy, ten years old, was admitted into the Hospital who had been ailing for six weeks with occasional vomiting and a relaxed state of the bowels, which, for some days, had amounted to rather severe diarrhœa. He had lost his appetite and grown thinner, and had rested ill at night, but pain referred to the back of the head, nearly constant but never intense, was the only symptom which appeared indicative of cerebral disease. After a continuance

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of these symptoms for six weeks, he was admitted into the Hospital as much on account of his failing health as of any solicitude excited by the head-ache. He was perfectly intelligent, and distinctly referred to the occiput as the seat of pain; but there was no tenderness on pressure there, or about the upper part of the cervical spine. A sluggish condition of the pupils, which were more dilated than natural, and slight divergence of the eyes existed, but neither of them to such an extent as at all to have forced itself upon observation.

He survived his admission sixteen days. His appetite improved; for a few days his head-ache considerably lessened, though it did not altogether cease, but then again returned, and was referred alternately to the occiput and forehead. His improvement occurred while taking small doses of the iodide of potassium, but I do not imagine that any considerable importance is to be attributed to it; and a blister was applied to the nape of the neck, on account of some increased head-ache two days before he died. Death took place unexpectedly, and so gently, that the attitude of quiet slumber in which the boy was seen more than once during the night was undisturbed.

A large mass of yellow tubercle, a little irregular, but about two inches in diameter, was imbedded in the left hemisphere of the cerebellum, pressing on and distinctly flattening the medulla oblongata. There was no change in the brain-substance in the neighbourhood of the tubercle, or elsewhere, but the ventricles were much enlarged, their lining membrane was tough, and they contained eight ounces of perfectly transparent fluid.

It is worthy of note, that with the exception of slight old tubercular deposit at the apex of the right lung, the body presented no other trace of it. This is of importance, inasmuch as it shows that extensive disease in the brain may exist, independent of those general evidences of tuberculosis which often serve as a clue to the understanding of symptoms otherwise obscure.

In this case one symptom, and one only, was present to fix the attention on the probable existence of disease of the brain, and that was pain in the head. It was not intense pain, it was not sudden in its onset; brief in its stay, complete in its disappearance, relieved by attention to the state of the bowels, or even ceasing of its own accord, as did those neuralgic headaches which I spoke about at the last Lecture, but it was constant, varying indeed, now better, now worse, but never entirely absent.

Be the symptom of cerebral disease, then, what it may, the mere fact of its persistence attaches to it an importance which it is almost impossible to overstate, and which far exceeds what would belong to it, even though ten-fold more characteristic when present, if that presence were occasional and interrupted by intervals, during which it ceased completely. Of no symptom is this more emphatically true than of pain as a sign of cerebral disease.

In the great majority of instances the existence of any considerable deposit of tubercle in the brain, produces not merely pain, but also impairment of power over some of the voluntary muscles, showing itself in paralysis, or in convulsive movements, or in both. It is unusual for the latter to precede the pain, and still more unusual for them to continue for any considerable time without becoming associated with pain, and with other unmistakeable evidences of cerebral disorder.

Such exceptional cases do, however, now and then occur. A little girl, one of five children of healthy parents, in whose family no phthisical predisposition existed, had had uninterruptedly good health, not disturbed even by the process of teething. While at breakfast, when two years and a-half old, and apparently in perfect health, her mother noticed a tremulous movement of the right hand upon the wrist. In fourteen days the movement extended to the right arm also, and in another month to the right leg. At two years and nine months she came under my notice. At that time the leg and arm trembled in an almost equal degree, and the foot was drawn inwards. The child could stand, but could not walk; she could raise her hand to her head, could hold anything very light, but nothing of weight, in the hand. The tremblings ceased when in profound sleep, but the slightest irritation of the surface reproduced them without waking her. For about five weeks before I saw her her head had been constantly drawn towards the left shoulder, though it became quite straight when she was asleep; and she had some power to elevate it, though she was not able to keep it raised. When these symptoms first came on, she seemed somewhat out of health, lost flesh, slept badly, and her appetite failed; but for a month previous to her admission she had seemed well in all respects with the exception of the involuntary twitching.

The child was perfectly merry all day long, and some degree of constipation was the only symptom of disorder of her health. Aperients were given to her, but no other medicine. In five days there was marked diminution of the wry neck, and in nine the twitching of the arm and leg was also lessened. By degrees she acquired the power of standing firmly with very slight support, though, as often happens with children suffering from chorea, any excitement, or the consciousness of being watched, sufficed to bring back all the tremulousness almost in as great a degree as when admitted into the Hospital. Simultaneously with this improvement, however, it was observed that the mouth was drawn somewhat to the left side; but this symptom gradually abated, and finally disappeared in the course of the next month. She became able to walk firmly, and to grasp objects well in her hand; and she left the Hospital, fourteen weeks after her admission, with no other ailment than slight tremulousness of the hand and arm, and somewhat impaired power over the right leg. For five weeks only this improvement lasted, but at the end of that time she began to walk less well, gradually grew heavy and drowsy, and sank, at the end of ten days, into a semi-comatose condition, in which both pupils were dilated, but the right especially so. Convulsions then came on, accompanied by rigidity of the left limbs, while the right were in violent movement. Slighter convulsions followed, in which both sides of the body were equally disturbed; but from the fourth to the sixth day there was a partial return of consciousness, which once more gradually disappeared. The right arm became permanently rigid, while automatic movements took place of the left arm, and of both legs. On the seventh day deglutition became difficult; on the ninth, impossible; and on the tenth day from the first occurrence of coma death took place.

The cerebral convolutions were flattened, the arachnoid on the convexity of the brain was granular, and much fluid escaped on removing the brain. There was abundant effusion of blood beneath the arachnoid at the base of the brain, covering both surfaces of the medulla oblongata, reaching as far forward as the optic commissure, and downwards, though slightly, on the posterior surface of the cord as far as the fourth cervical vertebra. There was a softened tubercle of the size of a pea at the posterior part of the right hemisphere of the cerebellum, and there were five masses of tubercle in the substance of the left optic thalamus, but no softening nor other appreciable change in the cerebral substance about the deposit. Tubercle, but to no considerable extent, was present in the lungs and bronchial glands.

In this instance, irregular, almost choreic, movements were for some months the only evidence of the grave cerebral disease which, advancing all the time, at length destroyed the patient. But even they might serve to excite suspicion. They were all the time limited to one side of the body, while chorea seldom continues so restricted, though one side only may be at first attacked. The drawing of the head towards the left side, and afterwards the paralysis, even though temporary, of the right portio dura, pointed to some abiding irritation of the brain, and served to raise the suspicion that the symptoms were of a graver import than at first seemed likely, if one looked merely to the apparently good health and the perfect happiness of the little child.

It would not be difficult to illustrate this subject further by a detail of more cases, but time warns me to desist. And what may you hope to have learnt from this Lecture? It has been a sad one, I confess, for it has consisted of a series of examples of the imperfection of our knowledge, of the fallacies to which we are liable, of the way in which the most remediless diseases may for a time be unsuspected. It would, indeed, have added much to the interest, much to the value of the Lecture, if I could have given an explanation of each of the variations from the ordinary course of disease, have shown how the nature of the appearances after death fully accounted for the absence of this symptom in one case, of that in another. But I cannot. There is, no doubt, a reason for all these discrepancies; and a grand motive for devoting yourselves to the scientific investigation of disease is the hope that you may discover some pathological principles

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which will clear up much that is obscure and solve many of our at present insoluble enigmas. Pray remember, however, that the value of an ascertained fact is not lessened because we cannot account for it. It remains to warn and guide us, though it may stand isolated, and though it may remain for years still far distant to bring it into due relation to other facts with which at present we cannot see its connexion.

But to the rightly-constituted mind, a Lecture such as this is sad, chiefly because it adds nothing to your means of cure. It may make you more acute to spy out the evil, it leaves you as helpless as ever to devise the remedy. It is even so; but may not this teach us the lesson of humility we all need? The novice can tell of many facts of which the expert can supply no explanation, and the power to heal halts sadly behind the ability to discover the disease. And thus, indeed, we all have to practise Medicine; to exercise an art in which we are sure of being in every instance eventually foiled, foiled by the dread sentence of irrevocable death. But we are appointed to console as well as to cure; to bind up the broken heart even when we cannot heal its wounds. To see by more acute perception the end even from the beginning; to know the thick darkness which will follow, what to less instructed eyes may seem but a passing cloud, fits us for the one office even when we cannot exercise the other. The perfection of Divine foreknowledge is associated with a tenderness far more than human, and it was just because He knew all, that He, the Great Physician, pitied all. In this example, the lesson which I have tried to help you to learn to-day finds its highest significance, and its widest application.

ORIGINAL COMMUNICATIONS.

CASE OF OSSIFICATION OF THE MUSCLES.

By WILLIAM SKINNER, M.B. Lond., &c.

Surgeon to the General Hospital and Dispensary for Sick Children, Manchester.

The subject of this rare form of disease is a boy, aged 13 years, and now in the Children's Hospital, Manchester. His parents are living, enjoy good health, and are free from any hereditary or constitutional disease. They have had eight children, of which this is the second; one died, aged 4 years, from bronchitis; another has just recovered from an attack of pleurisy, otherwise they have been healthy, free from rickets and rheumatism. The boy from his birth till between 6 and 7 years of age was a fine, healthy child, not having suffered from any illness. About six years ago a swelling made its appearance on the back of the boy's neck without any known cause. This disappeared in a week, another being observed behind the right shoulder. Three weeks later the arms gradually became so stiff that for about three months they were firmly fixed, and the boy was obliged to be fed: he, however, somewhat improved in this respect and for some time past has been able to feed himself, although with much difficulty. From that time to the present various lumps have formed in different parts of his body, these being principally about the spine and chest, and whenever the boy receives a blow it is invariably followed by a similar swelling; their appearance is preceded by pain, tenderness, and slight feverishness.

The condition of the boy at the present time is as follows:—He stoops somewhat; the shoulders are contracted; there is no motion in the right joint and very little in the left; the arms cannot be extended, and are in a semiflexed position, crossing the abdomen. The chest is narrow, very much flattened on either side at the junction of the ribs with their cartilages, and there somewhat nodulated. There is no movement of the chest with respiration. The abdomen and lower extremities are well developed, the latter straight, without signs of rickets. There is no movement in the spine, and the scapulæ are fixed; the buttocks and lower extremities present nothing abnormal. On manipulation a number of small projections are felt over the ribs. The right pectoral muscles are completely fixed, and converted into a hard, bony substance. The lower edge of the greater can be traced from a nodule below the right nipple, crossing the axilla, forming a hard and sharp ridge, which is continued into the biceps as far as its insertion into the radius; a number of little bony nodules may be felt along its course, and a long, irregular splinter of bone behind it. The muscles of the forearm do not seem affected. On the left side there is much the same condition of things as on the right, except that the muscles of the forearm are here beginning to be more or less fixed, and there exists a long, sharp, bony ridge from the outer condyle to about two-thirds of the length of the forearm.

Posteriorly, on the left side of the neck, and apparently in the trapezius immediately after its origin from the occiput, is a projection of hard, bony substance, about the size and shape of a pigeon's egg. Lower down, between the angle of the scapula and the spine, is a large, hard and irregular mass. In the dorsal region, at about the tenth and eleventh vertebræ, where the trapezius takes its rise, and apparently formed in the angle of this muscle of the left side, is another hard and somewhat moveable mass. It is angular in shape, and extends upwards on the side of the spine about one and a-half inches, and outwards and upwards in the lower fold of the muscle, about one inch. Moreover, in tracing the lower edge of this muscle to its attachment to the scapula some hardness is felt, and here and there sharp spicula of bone-like matter. On the right side, about two inches below the lower angle of the scapula, is another hard and irregular projection, about the size of a large egg, the last which has made its appearance: apparently it is incorporated in the lower edge of the latissimus dorsi. In the lumbar region on each side hard, bony plates occupy both spaces. The buttocks and lower extremities are quite free from disease, excepting one small nodule about the size of a common nut, situated over the right os calcis at the insertion of the tendo Achilles.

The boy enjoys good health, eats and sleeps well, and every function is normal. The urine has been analysed, and is natural both in quantity and quality. The case was for some time under the care of Mr. Southam, at the Manchester Infirmary, who gave iodide of potassium, but with doubtful benefit.

Examples of this peculiar disease may be found recorded by Mr. C. Hawkins in the *Medical Gazette*, 1843 and 1844; by Dr. Rogers in Vol. xiii. of the *American Journal of Medical Science;* by Dr. Wilkinson in the *Medical Gazette* for 1846; by Dr. Testelin in the *Gazette Medicale de Paris* for 1839. In the Museum of the Royal College of Surgeons of England there is a fine specimen of the disease, the description of which is given in the *Pathological Catalogue*, Vol. v., p. 138, No. 3367.

Manchester.

A CASE OF

RECOVERY FROM PSOAS ABSCESS AFTER OPERATION, TREATED WITH IRON AND QUININE AND ISSUES.

IS IRON USEFUL AS A PROPHYLACTIC IN SURGICAL FEVER?

By F. WILDBORE, F.R.C.S.L.

An officer of the Bengal Army, aged 28, put himself under my care in March, 1859. He was very thin, sallow, and shaky, and one of a family affected with scrofula. He had passed nine or ten years in India; his health had been very indifferent during his residence there, and he was shut up in Lucknow during both the defences. At the time I saw him he had been twelve months in England

He consulted me for a large, deep-seated, indurated swelling, occupying a great portion of the left iliac fossa, and passing under Poupart's ligament. The thigh was slightly flexed on the pelvis, which was depressed on the affected side, the buttock was flattened, and the pain was referred to the swelling, the trochanter major, inner side of knee, and to the lower part of the spine. The motions of the hip were free, and the spine in appearance was quite natural, but percussion over the upper part of the sacrum and the two last lumbar vertebræ induced deep-seated tenderness and flinching. His attention was first called to the swelling by feeling pain there while fencing, and he thought he had strained himself.

When I saw him the tongue was foul, the pulse 93, the appetite was bad, and he had occasional shiverings and

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perspirations. Four years ago he was thrown from a horse, and fell violently on his loins across a rut in the road, and the accident confined him to his bed several weeks; he was in great pain and unable to move. He was seen in London by Mr. Pollock, who very considerately advised him to take up his residence in Brighton during his treatment, as giving him the best chance of recovery.

On May 15 I made two issues in the back, on either side of the spine, over the seat of pain, and I ordered him a generous diet, and quinine and iron, three times a-day. The general health improved much under the treatment, and he gained several pounds in weight. The abscess meanwhile grew larger and softer, and extended under Poupart's ligament to about the middle third of the thigh, where it threatened at one time to point. On July 15 I found it necessary to open it (and I used Vienna paste for the purpose) at the centre of Poupart's ligament, where the skin was the thinnest. I had purposely delayed doing so as long as possible, as his constitution did not at all suffer. The issues were discharging freely. On the fourth day the slough began to separate, and a very large quantity of thin, serous pus, with flakes of lymph and points of blood in it, continued to discharge very gradually for several days, there was, I imagine, upwards of a quart of this matter. The wound was covered with water-dressing, frequently changed, during the day, and with a large, soft bread-poultice at night. It was not necessary to alter either his diet or his medicine, for at no time during his treatment did he suffer from any constitutional irritation. From the time of the opening of the abscess in July, 1859, till it closed one year afterwards, in July 1860, there were many little variations required in the management of the case, but scarcely any of sufficient importance to mention. The chief symptom continued during the greater part of the year, viz. pain referred to the upper part of the sacrum, and the last two lumbar vertebræ, leading him to remark frequently "I am gone in the back; I am done for;" and pain along the crest of the ileum.

The issues were kept open and discharging for six months, and I made fresh ones once or twice. They relieved the pain very much.

The amount of sulphate of iron he took both before and after the operation was considerable, and I am disposed to attribute the entire absence of constitutional irritation, and the general healthy progress of this very large abscess, to a cure, to the beneficial effects of this mineral. The issues, of course, did their part in remedying the bone mischief.

I have seen my patient very often since the abscess healed. The cicatrix has remained quite firm, and the iliac fossa is free. The buttock has regained its natural roundness, and he walks well. He sailed for India within the last month.

In September, in last year, I opened with Vienna paste a very large abscess in the thigh of a little boy, aged 8 years, (sent by my friend Mr. Brodhurst to Brighton for change of air,) suffering from scrofulous disease of the hip. He also took iron for some weeks previous to the operation, and he is doing well. In this case there was not at any time any constitutional disturbance. I merely mention this fact in connexion with the other case for what it is worth; but the two, taken together, seem to me to support in some measure, the opinion expressed by Dr. Simpson in his able Lectures, that iron in some shape or other, might be found to act as a prophylactic in warding off that serious complication after operations—Surgical fever (a).

Brunswick-road, Brighton, March 9.

PRACTICAL HINTS ON THE ACCOMMODATION OF THE EYE, ITS ANOMALIES AND THEIR TREATMENT.

By Mr. J. SOELBERG WELLS.

(Continued from p. 384.)

Myopia.

In myopia, the refracting power of the eye is increased, or the optic axis too long, so that parallel (emanating from distant objects) (a), or even not sufficiently divergent rays, are brought to a focus *before* the retina; circles of dispersion are produced upon the latter, and in consequence of this the object does not appear sharply defined, but indistinct and apparently surrounded with a halo. Therefore, only such rays as come from near objects and impinge sufficiently divergently upon the eye are focused upon the retina.

The range of accommodation is not diminished in myopia, for if we lessen the state of refraction by means of a suitable concave glass, the patient should be able to see perfectly from about 3½″ — 4″ to an infinite distance. If this be not the case, the range of accommodation is diminished.

Myopic persons generally come to us with the complaint that, although they can see the very smallest objects perfectly, they cannot see well at a distance. In order to improve their vision for distant objects, they nip their eyelids together; the reason for this is twofold:—1. They by this means narrow the opening between the lids, and thus cut off some of the peripheral rays of light, and consequently diminish the circles of dispersion on the retina. 2. They thus exercise a certain amount of pressure upon the eyeball, the cornea becomes somewhat flatter and the far point removed further from the eye, the latter therefore becomes less myopic.

(We must, however, be upon our guard not at once to pronounce a person myopic because he cannot see well at a distance, for we shall hereafter show that hypermetropia also causes this imperfection, and in the latter case convex and not concave glasses are required to render vision of distant objects perfect.)

Myopia is often hereditary. The seeds of it are also frequently sown in childhood, either through over exertion of the eyes at near objects, or through some affection of the cornea, in consequence of which the latter may become more prominent, or be rendered cloudy. Generally, however, short-sightedness appears first about the age of puberty. This is perhaps owing to the fact that many trades (*e. g.* engraving) or professions, which are apt to produce it are entered upon at this period of life. Continued working at objects placed very near the eyes (as in watch making, engraving, fine needlework, etc.) is one of the most frequent causes of myopia. Persons thus employed continually accommodate for a very near point, and, after a time, they are unable to relax their accommodation sufficiently to unite parallel rays upon the retina. They are myopic.

The cause is also not unfrequently situated in the refracting media. The cornea may, for instance, be more or less cloudy (from previous inflammation); the patient then approaches the object closer to the eye, in order to obtain a larger retinal image of it, and in this way myopia may soon be produced.

Lengthening of the eyeball (as, for instance, in sclerotico-choroiditis posterior) (b) is also often met with as a cause of short-sightedness. On account of this increase in the length of the optic axis, parallel, or even not sufficiently divergent rays are brought to a focus before the retina. In extreme cases of myopia, sclerotico-choroiditis posterior is almost always present. Von Graefe, indeed, lays it down as a general rule, that when the far point lies nearer than 5″ from the eye (the myopia being therefore greater than ⅕), we may almost with certainty diagnose the presence of this affection. But it may also be present in slighter cases of myopia (I have sometimes seen it in cases where the far point lay at 10″ — 12″ from the eye); and we should, therefore, invariably examine all short-sighted persons with the ophthalmoscope, for this disease is always a dangerous complication.

It is of consequence (as Donders strongly urges) accurately to determine the amount of myopia, so that we may hereafter be at once able to judge whether it has remained stationary or has progressed. In the most favourable cases the myopia remains stationary at the adult age; later in life it may even decrease somewhat, but generally this is not the case; and the popular idea that myopia decreases in advancing years, is, according to Donders, erroneous. This error, he says, is caused by the fact, that it was thought possible to determine the degree of myopia by the position of the near point, and partly, also, by the fact, that short-sighted people can see better at a distance when they get older, this being due to

(a) *Medical Times and Gazette*, No. 463, New Series.

(a) Rays coming from objects distant about 18′ or 20′ from the eye, may considered as being already parallel.

(b) In England this affection is generally termed a "crescent," on account of a white crescentic patch at the side (mostly the outer) of the optic nerve entrance, with which it is disease generally commences. The term "sclerotico-choroiditis posterior," which von Graefe gave it, is, however, much to be preferred.

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the increasing diminution in the size of the pupil. There is nothing to be feared from a slight stationary myopia. Far different, is it, however, if it be progressive; for then it is always a source of danger to the eye. Upon this important point let me give the following extract from Donders' paper:—

"During youth every myopia is, perhaps, more or less progressive; the progress of the affection is then accompanied by symptoms of irritation, which, according to Von Graefe, may even assume the character of sclerotico-choroiditis posterior. This is the critical period for the myopic eye; if the myopia does not at the same time increase too much, it may remain stationary, or at a more advanced age even decrease; if, however, it becomes greatly developed, we shall find it almost impossible hereafter to arrest its progress. At this stage we must, therefore, avoid everything that may cause determination of blood to the eye, and thereby tend to increase, not only the sclerotico-choroiditis, but also the tension within the eye. Among these causes we must particularly include working with the head bent forwards. I cannot lay too much stress upon this. Every progressing myopia is threatening to the eye. If it remains progressive, the eye will soon become less and less usable (troublesome symptoms at the same time showing themselves), and not unfrequently vision is irrevocably lost at the age of 50 or 60 (if not even sooner), through detachment of the retina, extravasation, or atrophy and degeneration of the yellow spot" (c).

We often meet with very slight cases of myopia, so slight, indeed, that the persons are not aware that they are short-sighted. If, however, we tell them to look at a distant object, a very slight concave-glass of, perhaps, 60″ or 50″ focus improves their sight. There is, however, another form of "myopia *in distans*," which was first described by Von Graefe, and which appears to depend upon a peculiar spasm of the muscle of accommodation during the attempt of relaxation. Our space will not, however, permit us to enter upon this subject; we must, therefore, refer our readers to Von Graefe's article upon this affection (d).

The degree of myopia is easily determined according to Donders' method. If, for instance, a myopic person can read No. 1 of Jäger (e) up to a distance of 10″, his far point lies at 10″, and his myopia = $\frac{1}{10}$; for with a concave glass of 10″ focus he would be able to unite parallel rays upon the retina; for does not this glass render parallel rays so divergent as if they came from a distance of 10″ before the eye? We at the same time obtain a clue as to what glasses the patient will require for distant objects.

But although theoretically a concave-glass of 10″ focus should be the proper one, we find in practice that it would be too strong. This is due to the convergence of the optic axes, for this convergence prevents the eye from accommodating itself for its far point, the latter is only attainable when we look at distant objects with parallel optic axes. We should, therefore, find that our patient would, perhaps, require concave glasses of 12″ or 13″ focus.

Nothing is easier than to determine whether or not the glass thus found accurately suits the patient's sight. We have but (as Donders points out) to let him look through the proper concave glass at No. 20 of Jäger's test-type, placed at a distance of about 20′, so that the rays would impinge parallelly upon the eye. In our supposed case, the spectacles would be No. 10 concave. With these he can read Nos. 19 and 20 fluently. We now alternately place very weak concave or convex glasses before the spectacles, and try their effect. If slightly concave glasses improve vision, the original glasses (No. 10) are too weak; if, on the other hand, convex glasses improve it, the original glasses are too strong. If neither the one or the other render any improvement, the spectacles suit exactly. Let us illustrate this proceeding by a few simple examples:—

A comes to us with a myopia = $\frac{1}{10}$, we give him concave glasses of 10″ focus (f), and tell him to read No. 20 at 20′ distance. He can do so, and even see No. 19, but somewhat indistinctly. We place No. 60 convex before the spectacles, and find that this renders the letters clearer, convex 50 improves vision still more (with it he can read No. 18), but convex 40 renders it more indistinct. The original glass (concave 10) is, consequently, somewhat too strong, and, in order to suit the patient's sight exactly, we must deduct 50 from it. His myopia is, therefore, $\frac{1}{10} - \frac{1}{50}$; consequently, $= \frac{1}{12\frac{1}{2}}$. We give the patient concave 13, and find that neither concave or convex glasses render any improvement. He is, therefore, accurately suited (g).

B also appears to have a myopia = $\frac{1}{10}$. He is tried in the same way with concave 10. In his case we, however, find that convex glasses render his vision more indistinct, but that concave glasses improve it,—concave 50 most of all;—we therefore have to add this to the original glass (No. 10), which was too weak. His myopia, therefore, = $\frac{1}{10} + \frac{1}{50} = 8\frac{1}{3}$. We try concave 9, and find that vision is not improved by any weak convex or concave glass. Another patient desires to have spectacles which will enable him to see objects at a distance of 2′ (for instance, the music whilst playing the piano). For distant objects he requires concave 12. How are we to find the right glasses for objects at 2′? Simply thus: If his myopia equals about $\frac{1}{12}$, the glasses to see with at 24″ will be about $-\frac{1}{12} + \frac{1}{24} = -\frac{1}{24}$. Hence concave 24 will suit him for seeing at 2′.

In the same way we can find what glasses are required for reading at 1′ distance in a myopia = $\frac{1}{8}$; $-\frac{1}{8} + \frac{1}{12} = -\frac{1}{24}$. Concave 12 would be required for this purpose. We shall, however, find that the patient requires a somewhat weaker glass, because the convergence of the optic axes to a point 12″ distant, already necessitates an accommodation for a nearer point.

As the amount of the range of accommodation (A) which the patient possesses very materially influences our choice of spectacles, and the question whether or not they are to be used for near objects, we must, in the next place, shortly consider how the range of accommodation is to be tested in a myopic eye. We may do this in two ways:—

1. We let the patient read No. 1 of the test type and by alternately moving it nearer and further from the eye we ascertain his near (p) and far (r) point. Let us suppose that p = 3″, and r = 6″. This range of accommodation is found by the formula $A = \frac{1}{p} - \frac{1}{r}$, therefore $A = \frac{1}{3} - \frac{1}{6} = \frac{1}{6}$.

2. Donders has lately, however, preferred the following plan:—He gives the patient those glasses which neutralise the myopia, and enable him to see distant objects distinctly (by means of which he can therefore unite parallel rays upon the retina). Let us again suppose that No. 10 (concave) is the weakest glass with which he can read No. 19 or 18 quite distinctly and sharply at 20′ distance. His far point will, therefore, with concave 10, lie at infinite distance (∞). With the same glass we now try how near he can read No. 1 comfortably and with ease; let us suppose that this be at 5″; his A therefore = $\frac{1}{5}$, for $r = \infty$, p = 5, $A = \frac{1}{5} - \frac{1}{\infty} = \frac{1}{5}$.

The great advantage of this method is, that the patient really accommodates for his far point, which is not the case in the former plan; for owing to the amount of convergence at 6″, the patient cannot relax his accommodation sufficiently to accommodate for his far point.

(To be continued.)

(c) Von Graefe's "Archiv," vol. vi. 2, 220.

(d) Von Graefe's "Archiv," vol. ii. 1.

(e) At Moorfields we use some test types, which correspond to Jäger's *schrift-scalen*, and which may (I think) be obtained at Mr. Churchill's.

(f) On the Continent, and at the Royal London Ophthalmic Hospital, Moorfields, the concave glasses are numbered according to their focal length (which is negative). The glasses, concave, convex, prisms, etc. are contained in a box, which may be obtained from Mr. Pillischer, 88, New-Bond-street, for £4 12s., or a larger sized one for £6.

(g) The distance between the glass and the eye (about half an inch) we have not calculated, in order to render the formula as simple as possible.

THERE are districts where Fever lurks constantly, occasionally making a great sweep in the population of village or town. These are the districts where the clergy, the educators of children, the employers of labour, are in despair, because ineradicable vice blights all their labours. Drink and profligacy abound wherever fever, ague, and rheumatism are fixtures. It is an old and sad story, that of the use and abuse of stimulants in damp and unwholesome settlements,—everywhere, from the Irawaddi to the Mississippi,—and it is as true and as dismal in the heart of England as anywhere in Asia or America. Where men cannot have a sound body they are sure to have an unsound *morale;* and if it is desired to find out the most certain home of drink, laziness, listlessness, restlessness, and consequent profligacy, it may at once be found in a district subject to inundation.—*Miss Martineau's "Health, Husbandry, and Handicraft."*

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REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

CONDUCTED BY
JONATHAN HUTCHINSON,
Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital,
AND BY
J. HUGHLINGS JACKSON, M.D.

STATISTICAL REPORT OF OPERATIONS PERFORMED DURING THE YEAR 1860.

THE subjoined Report comprises the cases supplied by the following Provincial Hospitals:—

The Derby, Leeds, Leicester, Sussex County, Addenbrooke's (Cambridge), Nottingham, Chester, Cheltenham, West Norfolk and Lynn, Sheffield, Hull, York, Northampton, and Gloucester.

DOUBLE AMPUTATIONS.

Case 1.—The Leicester Infirmary: Mr. Macaulay.—A very healthy man, aged 33. Both hands and the right forearm completely smashed. At the time of the operation (thirteen hours after the injury) he was so feeble that chloroform was not given. He rallied directly after the operation. The wounds healed almost entirely by first intention. *Case* 2.—The Derby Infirmary: Mr. Johnson.—A man, aged 26. Both legs smashed by a train. Amputation through the right knee-joint, and an inch below the left knee. Secondary hæmorrhage from the left stump took place, for which the femoral artery was ligatured. Recovered.

AMPUTATIONS THROUGH THE THIGH.

Case 1.—The Leicester Infirmary: Mr. Paget.—A man, aged 59. Large tumour springing from the head of the tibia, measuring nineteen and a-half inches round, soft and elastic. It was noticed as a small lump one and a-half years before operation. The skin over it was slightly bluish. One large vein and its branches ramified over it. At the inner side it had a slight red tinge. There was no enlargement of the inguinal glands. On rotation of the leg there was crepitus. He had but little pain until the fortnight before operation; the pain had then been severe. His health was excellent in every way. Amputation in the lower third of the thigh by one large oval, integumental flap cut from the anterior surface of the thigh. He recovered well. On section the tumour was greyish and granular, with coagulated blood here and there. In parts it was of a honeycomb structure; under the microscope there were found large cells of various shapes with nuclei. *Case* 2.—The Leicester Infirmary: Mr. Paget.—A healthy, stout man, aged 30, of temperate habits. His foot and leg had been smashed by the flying off of a millstone. Amputation (circular). He speedily convalesced until the wound was nearly healed, when the skin over the bone became red, shining, and tense, and exfoliation of bone seemed threatening. He, however, improved by rest. Recovery. *Case* 3.—The Leicester Infirmary; Mr. Paget.—A woman, aged 40. Disease of the knee-joint. Amputation. A long, oval integumental flap was cut from the anterior aspect of the thigh; it was turned back, and the knife was then swept round, dividing all structures at right angles; the one long flap was then brought down by sutures, etc. The wound healed nearly by first intention. *Case* 4.—The West Norfolk and Lynn Infirmary: Mr. Marsters Kendall.—A lad, aged 19. Compound fracture of the right knee. Laceration of the soft parts and injury to the vessels. His leg had been caught in the works of a thrashing machine. He was brought to the Hospital a distance of eighteen miles, and lost a great deal of blood. Primary amputation of the thigh in the middle third. He continued in a very low state for some time, but gradually gained strength. The stump healed rapidly. Recovery. *Case* 5.—Addenbrooke's Hospital (Cambridge): Mr. Lestourgeon.—A very thin, delicate boy, aged 13. Necrosis of the upper half of the tibia. The disease was rapidly extending, and very near the knee-joint, and the boy's health was giving way. Amputation by Teale's method above the knee. Recovery. *Case* 6.—Addenbrooke's Hospital (Cambridge): Mr. Lestourgeon.—A delicate, strumous-looking girl, aged 13, admitted with disease of the knee of eighteen months' duration. Amputation (circular). Recovery. *Case* 7.—Addenbrooke's Hospital (Cambridge): Mr. Hammond.—A healthy lad, aged 17. Disease of the right tibia and knee-joint. He hurt his knee by a fall three years ago. He suffered great pain, and his health was giving way. Amputation (circular). Recovery. *Case* 8.—The Leeds General Infirmary: Mr. Teale.—A miner, aged 23. Amputation (rectangular) above the knee, for a tumour as large as a child's head, springing from the posterior surface of the head of the tibia. On examination it proved to be cartilaginous. He recovered with a good stump. *Case* 9.—The Leeds General Infirmary; Mr. Smith.—A woman, aged 36. Amputation (rectangular) in the lower third of the thigh, for very old disease of the knee. Rapid recovery with an excellent stump. *Case* 10.—The Leeds General Infirmary; Mr. Smith.—A feeble girl, aged 15. Amputation (rectangular) above the knee for old strumous disease of the knee-joint. Recovery rather slow. Stump very good. *Case* 11.—The Leeds General Infirmary: Mr. Teale.—A man, aged 27. Amputation (rectangular) in the lower third of the thigh for old disease of the knee. The stump required opening the same day on account of free bleeding. Recovery very rapid. Stump excellent. *Case* 12.—The Gloucester Infirmary: Mr. Wilton.—A girl, aged 16, bruised her knee eight years ago. From that time disease of the joint set in. Amputation (flap) at the middle of the thigh. Recovery. *Case* 13.—The Gloucester General Infirmary: Mr. Wilton.—A woman, aged 20. She first had "housemaid's knee," and, when that subsided, disease of the knee-joint commenced. It continued to be attended by constant deep-seated pain in the outer part of the joint, which the slightest movement greatly aggravated. Amputation (flap) at the lower third of the thigh. Recovery. *Case* 14.—The Gloucester General Infirmary; Mr. Wilton.—A woman, aged 22. About twenty-eight months ago, when suffering from small-pox, her knee became diseased. A large abscess formed at its outer side. It discharged, and many pieces of bone, from the head of the tibia, came away. The limb was much bent. Amputation (flap). Recovery. *Case* 15.—The Cheltenham General Hospital: Dr. Wright.—A boy, aged 9. Amputation (circular) above the knee for disease of the knee-joint. Recovery. *Case* 16.—The Cheltenham General Hospital: Dr. Wright.—A man, aged 30.—Amputation (circular) for disease of the knee-joint. Recovery. *Case* 17.—The Cheltenham General Hospital: Dr. Wright.—A boy, aged 12. Amputation (circular) above the knee for disease of the knee-joint. Recovery. *Case* 18.—The Leicester Infirmary: Mr. Benfield.—A girl, aged 19. Disease of the knee-joint of sixteen years' duration. Partial displacement of the tibia outwards. Large sinus on the outer side. Greatly emaciated; very feeble. Amputation (circular) in lower third of thigh. Recovery. *Case* 19.—The Leeds General Infirmary: Mr. Hey.—A boy, aged 14, had twice been submitted to operation for removal of sequestra from the tibia. The knee-joint having become implicated, amputation (rectangular) through the lower third of the thigh was performed. He recovered rapidly, and had an excellent stump. *Case* 20.—The Leeds General Infirmary: Mr. Teale.—A boy, aged 8. Amputation (rectangular) through the lower third of the thigh for old disease of the knee. In three weeks free bleeding from the femoral rendered it necessary to open the stump and ligature the vessel. His recovery was good, and stump excellent. *Case* 21.—The Leeds Infirmary: Mr. Teale.—A man, aged 20. He had had necrosis of the whole tibia and diseased knee-joint. Amputation (rectangular) through the lower third of the thigh was performed. Free hæmorrhage, on the sixteenth day, took place. The stump was opened, and the femoral artery tied. He recovered rapidly, and obtained a beautiful stump. *Case* 22.—The Leeds General Infirmary: Mr. Smith.—A girl, aged 19. Amputation (rectangular) above the knee for disease of the knee of ten years' duration. Rapid and excellent recovery. *Case* 23.—The Leicester Infirmary: Mr. Macaulay.—A boy, aged 14, weak and emaciated. Disease of the knee-joint of long standing. Amputation (circular) in the lower third of the thigh. The bone ulcerated

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through the flap and projected. A ring of bone exfoliated, and the wound then healed. He gained flesh rapidly, and recovered. *Case* 24.—Leicester Infirmary: Mr. Macaulay.—A lad, aged sixteen. Four months before he had pain and tenderness at the inner side of the head of the tibia. It gradually enlarged, and in a short time there was a distinct tumour. He was admitted December 1. It was considered to have the character of malignant osteo-sarcoma. Amputation (circular) at the middle of the thigh. During the first six hours after amputation, he had three distinct flows of blood, to the extent of about two ounces each time. Nine hours afterwards a very large flow, twelve or sixteen ounces at least. The stump was then opened up. The blood was seen to issue from the femoral vein; this was ligatured, and brandy freely given, the boy being in a state of syncope for some time. He rallied, and recovered well. A small exfoliation delayed his recovery for a week or two. The inguinal glands were unaffected throughout. *Case* 25.—The Leeds General Infirmary: Mr. Hey.—A man, aged 21. Amputation (double flap) for old disease of the knee. Recovery was very rapid. *Case* 26.—The York County Hospital: Mr. Husband. —A girl, aged 17. Strumous ulceration, etc. of stump of a leg amputated nine years before. Recovery. *Case* 27.—The York County Hospital: Mr. Husband.—A lad, aged 9. Amputation of middle of the thigh for strumous disease, and extensive external ulceration of the knee. When admitted he was in a most extreme state of marasmus from want of food, etc. He recovered rapidly. *Case* 28.—The York County Hospital: Mr. Keyworth.—Amputation for strumous ulceration of knee-joint, etc. Amputation by lateral flaps. Numerous abscesses formed in the stump and groin. Recovery. *Case* 29.—The Sussex County Hospital: Mr. Lowdell.—A man, aged 47. "Fungoid" disease of the entire calf of the leg. The knee-joint was contracted at almost a right angle. The disease had existed for some years. Recovery. *Case* 30.— The Nottingham Infirmary: Mr. Thompson.—A boy, aged 10. His right leg had been torn off about the middle of the thigh by an accident from a thrashing machine. Amputation by anterior and posterior flaps at the upper and middle third of the thigh. Recovery. *Case* 31.—Addenbrooke's Hospital (Cambridge): Mr. Lestourgeon.—A man, aged 44. Ulcerated stump after amputation. Eighteen months before there was great pain, profuse and fetid discharge from the stump, and the tuberosity of the tibia was nearly through the integument. His health was much impaired. Amputation (circular) above the knee. Recovery. *Case* 32.—Addenbrooke's Hospital (Cambridge): Mr. Lestourgeon.—A man, aged 24. Ulceration of the cartilage of the knee-joint. The disease commenced eleven months before, without any apparent cause, and had been advancing ever since. His health was much impaired. Amputation (circular). Recovery. *Case* 33.—The Northampton Infirmary: Mr. Mash.—M. S., aged 16, admitted September 18, a healthy-looking youth, but much reduced in health and strength, was the subject of a large, deep-seated abscess, which was said to have come on slowly and spontaneously six weeks before, and which now involved the whole of the lower third of the thigh. When this was opened, the entire lower third of the femur was found necrosed; the knee-joint speedily became involved, and circular amputation in the middle of the thigh was performed under chloroform eight days after admission. He rallied quickly after operation, though the stump healed tardily by granulation; he was discharged cured two months after operation, and has since grown enormously fat. *Case* 34.— The Northampton Infirmary: Mr. Mash.—G. S., aged 21, a delicate, but not unhealthy-looking man, admitted December 11, 1858, had for three years been the subject of chronic disease of the knee-joint, which had been alternately better and worse, but had recently become aggravated, acute inflammatory disorganization being developed, with intense pain and formidable hectic. Amputation above the knee was performed under chloroform a week after admission, slight secondary hæmorrhage occurred on the seventh day, and he remained much enfeebled during the first month, but ultimately made a good recovery, and was discharged cured two months after operation. *Case* 35.—The Northampton Infirmary: Mr. Mash.—M. A. H., a married woman, aged 30, thin, pale, and wan, admitted April 30, 1859. She had suffered for nine years from chronic disease of the knee-joint, which had apparently resulted in contraction and spurious anchylosis of the joint, until, by the ministrations of a "bone-setter," it was converted into acute, inflammatory destruction of the articulation. A fortnight after admission circular amputation of the thigh in its lower third was performed under chloroform; the stump healed very tardily, but without any serious symptoms, except a short attack of erysipelas, and she left the Hospital three months after operation, with a very small but healthy sore still open. *Case* 36.—The Northampton Infirmary: Mr. Terry.—G. T., aged 10 years, admitted May 7. While running behind a vehicle his leg became entangled in the spokes of a wheel and was forcibly twisted. The result was a lacerated wound in the median line of the popliteal space, upwards of three inches in length, extending through the posterior ligament of the knee-joint, which was freely laid open. The condyles of the femur were partially displaced backward and outward, but the vessels and nerves were uninjured. An attempt was made to preserve the limb, but profuse suppuration, extending from the joint between the muscles of the leg down to the foot, with formidable hectic, occurred, and circular amputation immediately above the knee was performed under chloroform a month after admission. He made a speedy recovery, and was discharged cured five weeks after operation.

FATAL CASES.

Case 37.—A man, aged 22. Amputation (primary) for compound comminuted fracture of the leg, implicating the knee-joint. There was also extensive laceration of the muscles. His leg had been crushed by a railway carriage-wheel passing over it. He had lost much blood before he was brought to the Hospital. He never fairly rallied, and died on the third day. *Case* 38.—A railway guard, aged 36. Admitted for compound comminuted fracture of the right leg. The soft parts were much lacerated. The left foot also was crushed. The leg was amputated (Teale's operation) above the knee shortly after admission. On the second day gangrene commenced in the stump, and he died the same day. *Case* 39.—Amputation above knee for diffused aneurism in the calf. Death. (See *Case* 3.—Ligature of Arteries.) *Case* 40.—A man, aged 40. The upper half of the tibia crushed by a railway engine. Primary amputation (flap) at the lower third of the thigh was performed. He progressed pretty well for three weeks, when the stump began to suppurate. Diffused suppuration extended to the upper part of the stump, and he died fourteen and a-half weeks after the accident. *Case* 41.—A man, aged 68. Admitted November 1, 1859, with considerable swelling about the right knee, but no fluid could be detected in the joint. This state, he said, had existed about a year. He had had tolerably good health. About two months after admission fluctuation was detected above the knee, and a considerable amount of pus was let out. The drain continued excessive, and as there was no doubt that the joint was implicated, it was decided to amputate the thigh, which was done by anterior and posterior flaps. On examination of the interior of the joint, the structures were found pulpy and otherwise diseased. He progressed favourably for three weeks, but after this symptoms of exhaustion showed themselves, from which he gradually sank, and died May 23, 1860. *Case* 42.—A very feeble girl, aged 19. Amputation (rectangular) above the knee for strumous disease of that joint of old standing. Rigors and vomiting occurred on the fourth day and until her death on the seventh day. At the *autopsy* "all the viscera were found very fatty." *Case* 43.—A delicate, strumous lad, aged 10. Amputation (rectangular) for disease of the knee joint. He died from pyæmia six weeks after the operation. *Case* 44.— Amputation of the thigh for disease of the knee-joint, of some years' duration. She was a weak, strumous subject. Amputation by lateral flaps. The smaller vessels did not bleed at all, and were not ligatured. There was some secondary hæmorrhage on the second day. She progressed unfavourably, and died of exhaustion two months afterwards. *Case* 45.—A boy, aged 16. His leg had been drawn in between large cogged-wheels, and was torn off just below the knee. The broken end of the tibia projected; but the wound of the integuments extended above the knee. The knee-joint had escaped. He had lost a large quantity of blood; but the bleeding had ceased on admission. Amputation (circular) about two hours after admission. Scarcely any blood was lost during the operation. He died fifty-one hours after the operation. *Case* 46.—A dark, strumous-looking man of healthy family, admitted October 23, 1860, with considerable swelling about the right knee in which fluctuation could be distinctly

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felt. He had been ill for more than a year. On examining his chest, increased vocal resonance, and prolonged expiratory murmurs were heard under the right clavicle, where also the heart sounds were distinctly audible. Under these circumstances there was considerable reluctance at resorting to operative measures; but as the joint, which a few days after admission had been opened, continued to discharge profusely, whereby symptoms of hectic fever showed themselves, this seemed his only chance, and at his earnest wish amputation of the thigh, between its middle and lower third was performed, by anterior and posterior flaps. Little direct union took place between the flaps, which assumed an unhealthy appearance. The discharge from the stump was exceedingly offensive and dark-coloured. Tongue dry, and constitutional symptoms decidedly unfavourable. On the fifth day after the operation considerable hæmorrhage took place from an artery, which at the time of the operation was considered too small to be tied. The flaps were separated, and the bleeding vessel secured; but he sank rapidly, and expired two hours afterwards from exhaustion. On examination of the joint after the operation the ends of the bones were found denuded of their cartilages, and the whole of the interior of the joint in a state of suppuration. At the *autopsy* tubercles were found at the apex of each lung; the liver was enlarged and fatty. *Case* 47.—A healthy labourer, aged 42, admitted March 5, having received an injury to the dorsal spine by the fall of a tree upon it; this produced immediate incomplete paraplegia, which, in the course of seven months, appeared to have undergone no improvement, motion of the lower extremities being almost abolished, the bladder paralysed, sensation being only slightly affected. At this time erysipelas of the right leg occurred, followed by acute abscess of the right knee-joint, which, when opened, continued to discharge profusely. As a *dernier ressort* amputation of the thigh was performed under chloroform, and for the first few days the stump showed some tendency to heal, but the patient afterwards gradually sank, and died on October 28, being the eleventh day after operation.

ST. BARTHOLOMEW'S HOSPITAL.

ANEURISM OF THE FEMORAL ARTERY—LIGATURE OF THE EXTERNAL ILIAC—RECOVERY.

(Under the care of Mr. PAGET.)
[Reported by Mr. HERBERT EVANS.]

Robert T., aged 32, a sawyer by trade, was admitted into Darker Ward on November 1, under the care of Mr. Paget. He was of a fair complexion, and strumous-looking. He had had two attacks of rheumatic fever some years ago, and had had enlarged glands in the neck. About eight months before admission, he suffered severe pain in the calf of his right leg, and the veins of that limb became enlarged. He got rid of the pain; but about three months after this, whilst running, he felt a severe pain in his right groin. This was so bad as to keep him from his work a week. He did not then perceive any swelling or pulsation in the groin; these symptoms, however, appeared in somewhat less than a month, and continued to increase up to his admission on November 1, 1860.

On his admission there was a pulsating tumour, about the size of a small hen's egg, situated immediately below Poupart's ligament; and it was thought that the artery could be felt dilated immediately above that ligament, so that some of the Surgeons believed it would be necessary to tie the common iliac artery in order to get above the disease. There was an extreme varicose condition of the veins of the limb; but it did not appear to swell. The man's general health appeared pretty good.

On November 17, a little more than a fortnight after his admission, Mr. Paget ligatured the external iliac. He made an incision about five inches in length, beginning at the centre of Poupart's ligament, and about half-an-inch above it, running in a curved direction outwards and upwards; the abdominal muscles were then cut through carefully, the fascia tranversalis exposed and divided, the peritoneum, together with the contents of the abdomen, were drawn upwards. The artery was felt beating, and of its natural size. A ligature was placed round it without any apparent difficulty. On tightening the ligature the pulsation in the femoral tumour ceased. There was hardly any blood lost during the operation; the wound was brought together with silver-wire sutures, and the man removed to bed. In the evening he seemed doing well. His skin was moist; pulse about 80. He had no pain, except on deep inspiration. At eleven o'clock, as he had not had any sleep, a grain of opium was given.

18th.—He passed a comfortable night, though he did not sleep much. Pulse 90, full and bounding; limb quite warm. He had taken some milk and some toast. He complained of slight numbness in his fingers, and a little pain in the elbow-joints; but he says he has felt this at times before the operation was performed. A grain of opium at night.

19th.—Passed a quiet night; had no pain. Tongue moist; pulse 96; limb natural temperature. The wound was dressed, and looked very well. Two sutures were removed.

He continued to go on improving, taking his food better; his pulse gradually falling. He required his opium at night. The only thing unsatisfactory about him was, that he did not lose the pain in the joints altogether; and some fears of pyæmia were entertained, as about this time he had a slight rigor, which was, however, soon relieved by a little brandy.

On the 22nd he complained of pain in his right shoulder, and was unable to move his arm without great pain; in other respects he was doing very well.

24th.—He had a good night, and felt well. The wound was looking very well. Tongue clean and moist; pulse 80. He complained of pain in the right knee, which was tender on touch. He still took opium at night.

25th.—He had a good night, and was taking his food better (milk, arrow-root, and beef-tea, brandy ʒij.). He was still unable to move his right arm, and complained of his right knee-joint, which was very tender to the touch, just above the patella. No fluid was detected in the joint. When he was quite still, he felt no pain anywhere. The wound was looking well, and was half healed.

26th.—Appetite improving. He did not sleep quite so well. Pulse 72. His right shoulder was a little better.

27th.—He did not sleep so well. His breathing was rather hurried. As his bowels were not freely open, he had an injection. He could now move his right arm without pain. The wound was suppurating freely. Two grains of quinine three times daily.

December 1.—Stated that he felt very well. His appetite was good, and the wound was looking well. He had lost all pain in the right shoulder, and could move that arm nearly as freely as the other. His bowels were open, and he slept well without opium at night.

The ligature came away on the eighteenth day, very satisfactorily. After this he went on very well; the only thing to be noticed was the state of the wound, which healed very slowly, was pallid, and assumed the look of a strumous ulcer. He was ordered a liberal diet, with some wine and beer. He took cod-liver-oil, and used nitrate of silver lotion to the wound. It was not until the beginning of March that the wound was quite well. He left the Hospital in the third week in March, feeling quite well.

ST. THOMAS'S HOSPITAL.

ANEURISM OF THE FEMORAL ARTERY—LIGATURE OF THE EXTERNAL ILIAC—RECOVERY.

(Under the care of Mr. SOLLY.)

James B., a carpenter, aged 32, was admitted on December 28, 1860, for a pulsating tumour in the upper part of the front of the left thigh. In shape it was nearly globular, and measured about four and a-half inches from above downwards, and about three and a-half inches across. Its upper border extended nearly as high as Poupart's ligament. It was tense to the touch, and the skin over it was slightly reddened. It had a firm and elastic feel. The leg and thigh were to some extent swollen and painful. He was a weakly-looking man, of light complexion, of anæmic appearance, and he had also an anxious expression. He appeared to be of a nervous and irritable disposition.

He said that he fell off a building three months before. He struck his left side by an iron bar. He did not, however, appear to have sustained any severe injury, but soon afterwards he noticed a small lump in the left thigh then about

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the size of a nut. It gradually increased in size, and he found that it pulsated. Three weeks ago (at which time it was as large as an egg) he had another fall, and from that time it enlarged more rapidly and became painful. He did not, however, leave off work until two days before admission.

December 28.—A tourniquet was applied over the artery and gentle compression used, not sufficient to stop pulsation entirely, as firmer pressure caused him great pain. A draught, containing ten minims of tincture of digitalis and thirty minims of tincture of opium, was given every night.

30th.—Repeated attempts were made both on the 29th and to-day to compress the artery above the aneurism by means of tourniquets and weights, but on account of his increasing restlessness and inability to bear the pressure the circulation could not be controlled continuously for more than an hour or two. The limb was wrapped up in cotton wool, and a roller was applied over its whole extent.

31st.—He complained of more pain to-day. The tumour appeared to be a little larger, and there was more redness over its surface. Ice was ordered to be applied.

January 1, 1861.—Pressure having been unsuccessful, Mr. Solly determined to ligature the external iliac artery. This vessel was therefore tied, about an inch and a-half above Poupart's ligament, at 2 p.m. Pulsation immediately ceased in the tumour. 7 p.m.—He has been very restless and irritable since the operation, and complains of great pain in the left leg and thigh, and in the back. The foot, at first, was cold. It was wrapped up in cotton, and a foot-warmer applied. The pulse was low (60), but not deficient in volume; it was soft. He took an opiate at bed-time.

It is unnecessary to follow day by day his general progress. He recovered well. There were never any symptoms of peritonitis. On the twenty-second day there was some pain about the wound, but it soon passed off and did not recur. The ligature came away on the 23rd. On February 16 the wound was healed, and on March 9 he left the Hospital well. The aneurismal tumour had greatly diminished in size, and was quite free from pulsation.

CARDIAC SYMPTOMS DEPENDENT ON ANÆMIA CLOSELY SIMULATING ORGANIC DISEASE, AND ENTIRELY DISAPPEARING UNDER THE USE OF IRON.

(Under the care of Dr. PEACOCK.)

The following case is of interest in connexion with several somewhat similar ones published in our Reports a fortnight ago (see *Medical Times and Gazette*, for April 5, page 363):—

H. W., aged 22, a servant, was admitted on January 8, 1861. She stated that she had been ill two months, and ascribed her attack to cold. She said that she had suffered from difficulty of breathing, pain in the chest, especially in drawing a full inspiration or after exertion, with palpitation, and occasionally tendency to faint, especially after walking. The difficulty of breathing was aggravated after taking food. For about two weeks she had had a hacking cough, with a little frothy expectoration, and about a week before she had spat up a very small quantity of blood. The cough especially troubled her in the mornings and came on in paroxysms. The catamenia had been quite regular till six months before, since which time they had been entirely suppressed. Her face was pallid and puffy, the lower extremities were also puffy, but did not pit on pressure. Tongue pallid, and covered with a yellow fur on the dorsum. Pulse quick. Bowels constipated.

There was some deficiency of the resonance on percussion over the whole of the left side of the chest, especially at the upper part, both before and behind. The respiratory sounds were harsh at the upper part of the chest, especially at the left apex. The cardiac dulness was somewhat large; a loud blowing systolic murmur was audible over the præcordial space, and both at the apex and base, but it was perhaps the most intense at the level of the third cartilage on the left side of the sternum. It was not heard at the top of the sternum, nor to the left of the spine in the dorsal region. There was no continuous murmur in the jugulars, but a harsh and interrupted murmur was readily produced by pressing the carotid arteries. The abdomen was not swollen; there was some pain and tenderness in the lumbar region. She occasionally coughed till she became sick, but was not sick independently. The urine had a specific gravity of 1·20, and was not albuminous. She was directed to take a draught containing fifteen drops of the tincture of the sesquichloride of iron, with half a drachm each of nitric ether and tincture of hyoscyamus in compound decoction of broom, three times a-day. Two pills of hyoscyanus and Dover's powder were given every night; mixed diet.

17th.—Her appearance is somewhat improved. She looks less puffy in the face, and somewhat less anæmic. The legs and feet are flabby, but do not pit on pressure. Cheeks much flushed; pulse 80, small and compressible. Systolic murmur very distinct at the base, and followed by slight doubling of the second sound. Breathing easier. A pill of morphia and hyoscyamus every night. Wine, one ounce and a-half. The dose of the tincture of sesquichloride of iron was increased to twenty minims, and subsequently to twenty-five.

24th.—General appearance decidedly improved; face less pallid and puffy, but still flushed. Pulse 80, quiet. Tongue clean, moist, not indented. The ankles and feet are not at all tumid. Her chest is generally sparingly resonant, and the respiration is harsh. Systolic murmur in præcordial region much less distinct. It is most intense about the level of the third cartilage to the left of the sternum, and thence in a line towards the middle of the left clavicle, while it is nearly inaudible below the mamma, and indistinct to the right of the upper part of the sternum. There is still a slight doubling of the second sound heard at the base. A systolic whiff exists in both carotids, the murmur is not audible to the left of the spine, nor at the lower angle of the left scapula. A mixture containing quinine and iron, with tincture of hyoscyamus was given three times a-day, and pills of rhubarb and nux vomica at bedtime occasionally.

February 4.—General appearance has continued to improve. The systolic murmur is still audible, but only very slightly. It is of short duration, and is heard apparently in the course of the pulmonary artery, while it is scarcely audible in the course of the aorta, and not at all at the apex. The catamenia had not appeared. From this time she continued steadily to improve, the murmur entirely disappeared, and she was presented cured on March 14.

Medical Times and Gazette.

SATURDAY, APRIL 20.

OWEN ON HUNTER.

Some six years ago we sat in the theatre of the College of Surgeons, as part of an audience, listening to one of those oratorical displays of the learning and eloquence of the then Hunterian Professor, which used to be the pride and luxury of the members. The particular lecture to which we refer was introductory to the Hunterian course on Fossil Remains, and its object was an explanation of John Hunter's manuscript essay on Extraneous Fossils. All who were present on that occasion must have admired the practised skill of the Lecturer. His philosophical views of the methods and objects of anatomical study were of the high standard with which his regular hearers had grown familiar. His recapitulation of his labours in the service of the College must have astonished some who were only occasional visitors. His enthusiastic allusions to the great Founder of the Museum, which it was his life-work to illustrate and amplify, met, as they always did, with an equally enthusiastic response. Many who venerated Hunter according to his general reputation of Anatomist, Zoologist, and Surgeon, were not aware of the extent of his progress in the seventh way in which the highest generalizations in anatomical science may be aimed at, by pursuing investigations beyond the animals that are to those that have been. Few only knew of Hunter's wide familiarity with the fundamental truths of the since named science of Palæontology, or of his sagacious speculations about the many problems that opened out before him as his collection of fossils gradually accumulated. He

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published little respecting them, and his paper in the *Philosophical Transactions* of 1794 had scarcely been heard of in the general circle of the Profession. But a surprise was in store for us. There was more important evidence than this of the amount and spirit of Hunter's researches into the zoology and anatomy of extinct animals, and the associated phenomena elucidating the past history of our globe. He had followed up his first communication to the Royal Society by a second, which for sundry reasons was withdrawn, and never published. A small, dingy, roughly bound, quarto writing book had been lying on the table during the early part of the Professor's lecture. Great was the curiosity when he exclaimed, "And now I can imagine the eager inquiries of my geological hearers as to the fate of this traditional contribution by the greatest Physiologist of his time to their favourite and fascinating science." Greater still was the satisfaction when, holding up to view the book upon which his hand had been resting, he said, "With equal pleasure I can assure them that this precious manuscript exists." The second meeting of the course was occupied by the reading of the Paper, and the third by a critical exposition of it. This manuscript has since been published separately by the College of Surgeons, but unfortunately is not to be found in these volumes. The explanatory and critical lectures of Professor Owen are, however, given at length, and form a most important part of their contents. From them and from the notes and appendix we learn the full history of this, one of the chief curiosities of Medical literature. It is unnecessary now to go over again the particulars of the subject as it has been repeatedly noticed in this journal. We must confine ourselves to an examination of two recently published volumes (a) so far only as they furnish us with new evidences of the scientific labours, projects, and almost prophetic views of Hunter.

The result of much time spent in the rooms of the Museum looking throgh the cases, and poring over the catalogues, is that we cease to wonder at anything Hunter is found to have done or attempted. He was one of those men who do not work for the sake of becoming great, but who become great by incessant working. Instead of, as is often said, laying the foundations of physiological science, we discover him oftentimes sketching out the details of the superstructure, and indicating analogies and combinations which some of us, with blind injustice, have plumed ourselves on being the first to perceive. Calm admiration is the feeling with which we accompany Owen through his commentary on Hunter's palæontological papers. We mark him in his published essay demonstrating the animal nature of fossil bones by a lengthened series of chemical analyses, thus affording the most convincing answer to the objection, so rife in the century or two preceding his time, to any scientific deductions from fossil remains, because, as it was contended, they were mere sportive evidences of the plastic force of Nature. He argues and acts upon the necessity of a study of comparative osteology in order to fix our determination of problematic fossils on a secure basis. The laws of the geographical distribution of animals now established as the fruit of world-wide zoological researches, shadowed themselves forth in Hunter's mind. He speculates upon the nature of the evidences by which fossil remains might elucidate the changes of temperature to which different parts of the earth may have been subject at different epochs; he points out more distinctly and with more detail the evidences which "extraneous fossils" afford respecting the alternations of exposure and submersion, or of dry land and sea which have successively occurred in various regions; and with a philosophical appreciation of the sufficiency and regularity of action among the natural causes of change in the earth's surface, he makes frequent and bold allusions to the thousands of years required for particular operations. Passing on to the resuscitated manuscript of the second Essay, Hunter tells us that "geological investigation has nothing to do with the original formation of the earth itself, but has only a connexion with the changes on its surface," and thus lays bonds on the bewildering tendencies, to which philosophers of his own and the previous age gave themselves up, to theorise upon the cosmological causes which were conjectured to have been employed by the Author of Nature to bring our planet out of a nascent and chaotic state into its present habitable condition. Hooke, Newton, Woodward, Burnet, Whiston, Buffon, and Werner thus committed themselves to "Theories of the Earth," and in a measure missed the true aim of geological science. He gives distinctness of meaning to the term "fossil," and points out the importance of that branch of the science which, under the new name of Ichnology, includes the consideration of impressions, casts, and moulds left by the forms and movements of animals, as well as by the operations of inorganic nature. He enunciates also another important principle—the coëvality of the fossils with the mineral strata in which they are found, not overlooking the exceptional condition of derivative fossils; and even makes a suggestion, in accordance with one of the most recent of geological discoveries, that "he saw no reason for supposing that the formation of granite is different from that of other rocks." So also he directs attention to the successive alternations of the sea and land in one place, and proceeds to discuss the various agencies of water in eroding, transporting, and depositing matter, and of volcanic eruptions and igneous expansive force in varying the forms and relative proportions of the several parts, and the operations of animal life in modifying and adding to the crust of the earth. It is not to be supposed that Hunter could remain free from error in all his geological speculations; but the amount of truth with which we have shown him to be familiar throws another gleam of glory over his scientific character. These Lectures of Owen's on the Hunterian Manuscript form only a small portion of the volumes he has so well edited. The remainder does not add much that is new to the reputation of the great anatomist. It, however, comes before the public for the first time, and will naturally enough be the object of curious scrutiny; and that scrutiny will fully justify the publication. It resembles a vast mass of building material brought together for constructive purposes, with here and there unfinished tracings of plans, instructions for the builders, directions for the collectors of new contributions, and memoranda as to the methods and means that have been used in the work so far as it has gone.

The first volume contains an introduction to the study of Natural History, in which are treated of, among many others, such questions as those of the origin of natural productions; the distinction and origin of existing species; the properties, states, and kinds of matter; the principles of classification; the points of connexion and dependence between vegetables and animals; and the arbitrary and natural divisions in Natural History. The physiological notes come next, and touch upon almost all the important topics which have been brought under modern investigation. The philosophical ideas, cautious speculation, probing notes and queries, and the many now verified surmises, which we read as we turn over these pages, make us feel as if we were communing with a cotemporary author rather than with the exhumed thoughts of the past century. What more striking illustration of this can we give than the following? One of our most familiar microscopical demonstrations is that of the movement of foreign bodies along the mucous membrane of the trachea by ciliary action. We gaze upon the phenomenon with the satisfaction of a

(a) "Essays and Observations on Natural History, Anatomy, Physiology Psychology and Geology." By John Hunter. Edited by Richard Owen, D.C.L. 2 vols. London: Van Voorst. 1861.

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solved problem. Hunter's point of view of the same object was that of prophetic assurance; but he had no instruments with which to work up to his own inspirations. Thus we read him expressing the fact with all but the real explanation, "that the mucus of the trachea is gradually conveyed up, is a fact, and the only thing wanting is the mode in which it is done. I conceive that the inside of the trachea is in constant action, and that that action is always directing the substance attached to it in its own direction." Observations on Embryology, especially on the development of the chick, which have already been included in one of the parts of the Museum Catalogue, on the Philosophy of Mind, on the Physiology of Plants, and on several points of Practical Anatomy, fill up the rest of this volume.

Hunter, at his death, left nine folio volumes of Dissections of Animals. These were copied by Mr. Clift, and are now published in the second of Professor Owen's volumes. This extraordinary accumulation of "Observations on Comparative Anatomy," as they are called in the Table of Contents, covers no less than 490 pages. It includes dissections of almost every type of animal, from the highest vertebrate to the Tubipora musica. A superficial glance at these memoranda gives, as it were, a great deal of the secret history of the great Museum. Throughout are traces of the incessant purchases made by Hunter of everything curious or useful that came in his way. We get glimpses at his associates and fellow-workers, and have laid open to us the sources of the supply of his collection. Lord Shelburn, then Prime Minister, sends him a large black monkey of the spider kind, of which the cranium, the kidney, the tongue, larynx, and the external ear still remain. Dr. Afzelius, a pupil of Linnæus, brings him home from Sierra Leone a young chimpanzee. He made preparations of the various parts of this creature, but, as its structure had already been described by another anatomist, he appears not to have recorded the results of his own dissection. One day he receives the following note:—"If you will step in at Banks's in Soho-square, you will find the corpse of the fine Sierra Leone cat, the inside of which is at your service. The skin is to be stuffed for the British Museum." On another, some one at the Tower sends him a brownish dun cat, something like the shargoss; and then he goes to Mr. Brookes's, a dealer in rare animals, and father of the lecturer Joshua Brookes, to see a civet cat dissected, and comes away with a short memorandum about the direction of the opening of the pupil, satisfied that the anatomy was similar to that of the common cat. Again, there arrive two young hyænas from Gibraltar, with a note of introduction, assuring him "You need not be afraid of them; for, in spite of what authors say, they are as tame as puppies." Nevertheless, they fought together and died, were injected and dissected. Jenner, one of his house pupils—the Jenner—sends him a young whale from Gloucester, and he gets an old black bear that had lost its teeth from a Mr. Gough, a dealer in animals on Holborn-hill. The Duke of Portland supplies a pigmy musk deer, of which he preserves the skeleton, now No. 3499 in the osteological series. Dr. Solander presents a white bear from Norway, Mr. Banks a questionable creature from Africa with the sobriquet of "Nick," and Mr. Clarke, probably the founder of Exeter Change, gives credit for a spotted cavy. He is puzzled about the copulation of beavers, and hunts up specimens that he may inject the penis, and so produce artificial erection. He finds time to dissect a Portuguese bittern, which, he says, "I shot when crossing the Tagus," and he makes a marginal drawing in his note-book to show some peculiarity of its stomach. Even this organ, picked up by the wayside, is taken care of, and years after gets set up in the Museum. In 1764 he buys a crocodile, which had been in a show for several years in London before it died, and takes care to send for Hewson to see it anatomised, and to hear an account of a previous dissection. The intention of this was that Hewson might see that "I had a tolerable description of the absorbents in the Amphibia, because I found him busy in the pursuit of this system in various animals, and hinting himself to be the discoverer of it even in birds, and to convince him that this description must have been written some considerable time before. Mr. Hewson at the time appeared satisfied, or, at least, made no remarks." An antelope comes from the Queen, and Royalises the collection.

Every one who has dissected much, and made many preparations, will acknowledge that he sees a great deal that he cannot understand at the time, and is obliged to set aside a number of things for future examination, with better means and leisure than can be commanded at the moment. Hunter often found himself in this predicament, and, no doubt, his shelves and bottles were loaded with these anatomical puzzles. What modern anatomist can tell us the distribution of the vessels on the internal surface of the uterus of the dog-fish? What other can tell us of the peculiarities of arrangement of the same vascular network in the various species of that fish? It is true that two or three years ago some finely injected preparations of these parts were placed within reach of the public; but it is a question whether they did more than elicit passing admiration. Even Leydig, in his elaborate "Beiträge zur mikroskopischen Anatomie und Entwicklungs geschichte der Rochen und Haie," only makes an approach to this information. And how much more should we learn at the Government School of Mines or among the leaders of the various competitive examinations? These fish carried Hunter quite out of the depths of his comparative anatomy; but he dissected them, injected them, made preparations of them, and now on the shelves of that wondrous Museum in Lincoln's Inn-fields, lies still unread by but a few, one of the most beautiful pages of the book of Nature. What would have been Hunter's feeling could he have seen with the powers of a modern microscope the marvels which he reverently stored up for a more favoured generation? How full should be the chorus of our *Te Deum* to whom so many of these things have since been revealed!

THE WEEK.

It is well known that for one of the two Jacksonian Prizes to be awarded by the Council of the College of Surgeons, the subject of Excision of the Knee-joint was chosen. The wisdom and propriety of this selection could not be doubted, for ever since the operation in question was revived by Mr. Fergusson in 1850, there has not been a subject, purely surgical, to which more attention has been bestowed, and about which there has been more difference of opinion. Several young Surgeons, in particular, both in London and the Provinces, having made themselves known by studying this matter, it was supposed that there would be several competitors for the prize, and the issue was looked forward to with unusual interest by the rising men of the day. To the astonishment of every one, the announcement was made last week that the prize was not to be awarded. This astonishment was greater as it became known that there was only one essay sent in, and that that essay was written by the gentleman who, next to the Surgeon who revived the operation, has probably had more practical experience of it, or has seen more of it, than any other Surgeon in England. At all events, Mr. Price—for it is of no use concealing his name—has signalised himself by his ardent devotion to the investigation of this subject. His recorded cases, and his practical observations in connexion with it, are well and widely known, and there is no one upon whom the honour in question could have been more worthily bestowed. Yet,

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although it is admitted by the referees that the essay of Mr. Price is one of great merit, it has been assumed that the writer has not fulfilled all the stipulated requirements; and we believe a most glaring injustice has been done to this young Surgeon. We do not speak hastily or without reason, for we have had the opportunity of inspecting the rejected essay, and we find that it is a most elaborate treatise. The beautiful and numerous drawings which accompany it ought, we hesitate not to say, to have sufficed to gain the prize, in the absence of any other competitor; and at first sight it is almost impossible to understand how it is that such a valuable mass of material should have been rejected. We have, however, been able to ascertain who the referees were, and it is no longer with us a matter of surprise that Mr. Price's labours have not been appreciated. Two of these gentlemen are Surgeons to an Hospital where the practice is pretty generally believed to be about half-a-century behind that of modern institutions, where the operation in question is notoriously opposed, and where one or two endeavours to adopt it have ended most unfortunately. The third referee is a very worthy gentleman, but one not given to encourage Surgical enterprise. We cannot for a moment doubt that if three Surgeons, properly qualified from practical acquaintance with the subject, had been chosen as referees, this glaring injustice would not have been done, and a great scandal would have been avoided. We feel certain that when Mr. Price publishes his essay he will be able to prove to the Profession that the Council of the College of Surgeons have failed in their duty, and that in rejecting his labours they have rejected that which would have been an honour to themselves. It says little for the confidence reposed in the Council that there was only one competitor for either of the Jacksonian Prizes this year. Excision of the Knee-joint and Diseases of the Prostate Gland are subjects which would certainly call forth something like a contest if the competitors were satisfied with the impartiality and knowledge of the judges.

An unusually frightful case of murder or suicide by poison —taken or given with the probable intent of producing abortion—has been investigated by Mr. Humphreys during the last week. A girl of 17, eight months advanced in pregnancy, spent the evening of Friday, March 22, in the company of her lover. They both took tea, and it is believed that she took some beer which was in the room in a jar. Ere he left, she complained of great pain in stomach, head, and back, and began to vomit. Symptoms of delirium came on about eleven. At three on the Saturday morning, she was seen by a Surgeon who thought her intoxicated, and, finding that she was not in labour, as he had been led to expect, left her. At 10 a.m. on Saturday, she was seen by Dr. James Baker, of Dorchester-place, who deposed that:—

"There were then no signs of labour. She was then quite insensible. Her tongue was swollen and hanging out of her mouth; her teeth was firmly clenched, and a green frothy fluid, mixed with blood, was issuing out of her mouth. I was informed by her aunt, the last witness, that she had complained of violent pain in her head, also a burning pain in her chest, and that she had been in dreadful agony about the navel. That she had vomited violently ten or eleven times during the night, and had also been very much purged, but that she had thrown the contents of the stomach and bowels away. I then gave it as my opinion that she had taken an irritant poison. I introduced the stomach pump, and injected about two quarts of tepid water, combined with antidotes; but *did not pump it out again* for fear the lining membrane of the stomach might be injured by such a process. Her mouth and tongue were very much parched and dry, and I therefore ordered them to be constantly moistened with a feather dipped in thin arrow-root and milk. On Sunday afternoon at 2 o'clock I removed from her a dead female child. She was then unconscious, and continued so all that day and all Sunday night. The infant weighed three pounds one ounce, and was one foot six inches long, and appeared to be about an eight months' child. It was quite fresh, no appearance of decomposition, and, in my opinion, had not been dead many hours. She never rallied, but remained insensible from the time I first saw her up to the time of her death which took place on Tuesday evening, the 26th, about 7 o'clock. I made a post-mortem examination, assisted by Mr. Gay. There was the usual incipient appearance of decomposition. The body was well nourished and fat. The brain —A slight inflammation of the arachnoid membrane, with an effusion of serum. The chest—The lower lobe of the right lung was extensively congested, and here and there patches of ecchymosis, the whole of the lung more congested than it should be. The left in the same condition, but to a less extent. A quantity of fluid in both pleural cavities. The heart was healthy, but flaccid. No fluid in the peritoneal cavity. No appearance of enteritis. The cardiac extremity of the stomach was redder than usual, and large veins seen running through its coats. The œsophagus and vessels were injected. The liver was large but healthy, a yellowish deposit in some parts. The spleen was healthy. The womb partially contracted after parturition. The bladder contained water, and the general appearance of the body was healthy."

Dr. Letheby deposed that the stomach showed no unnatural appearance on the outer surface:—

"When opened, I found it of a deep purple colour; it contained about half-an-ounce of a reddish brown liquid of the consistence of gruel. I very carefully examined the whole of the internal surface of the stomach, and the only thing I found was two pieces of metal, most likely from the stomach-pump, used by Mr. Baker. It also contained a great deal of starch, which was adulterated arrowroot, in a raw state and uncooked. I then tested it for organic as well as mineral poison, and I found zinc and antimony, with traces of mercury mixed with sulphate of lime. The intestines were then examined, and again I found mercury, zinc, and antimony, with much sulphate of lime; and the same result on the examination of the lung. I found no organic poison. I then examined the contents of the bag; the three sheets were all stained with abundance of starch and arrowroot; there were also sulphate of lime and zinc on them, with a great deal of bile; the other things I examined with the same result. The intestines show undoubted evidence of a *powerful irritant*. Either zinc, antimony, or mercury, if taken in a sufficient quantity, would procure abortion. I believe the death to be the result of the irritant, but I am unable to identify it, considering the time that elapsed between the vomiting and purging and her death."

It was shown that the girl's lover was the son of a dyer, and had access to many kinds of poisons. It was also stated that the girl had once tried to poison herself with laudanum. The inquest was adjourned to May 9.

The case of Dr. Macloughlin comes before the House of Commons next week, on an appeal from the decision of the War Office. The case, as represented by his friends, is this: He served in the Peninsula and in the Army of Occupation in the North of France; and, in consequence of his services, and of his professional acquirements, was twice recommended for promotion to the rank of Physician to the Forces; but he was refused this promotion, and informed that he was refused "because he had no private interest." He remonstrated, but was placed on half-pay. He appealed for redress to the Commander-in-Chief, but the Commander-in-Chief, in violation of the 12th paragraph of the Articles of War, refused inquiry and redress. Five years after being on half-pay, he was called on to serve, but without the promotion due to his former services. The Doctor, feeling that he had been ill-used, and, believing that, in consequence of the declaration of the Secretary at War, in the Army Estimates, June, 1814, he had the right to remain on half-pay if he wished it, declined to accept full pay. Without allowing him to be heard in his defence, his name appeared in the *London Gazette* on the 22nd of May, 1824, as being "dismissed His Majesty's Service for

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gross breach of discipline and disobedience to the orders of the Commander-in-Chief." By the decision of the twelve Judges, an officer on half-pay is not amenable to martial law; therefore, the Doctor contends that as he was on half-pay on the 22nd of May, 1824, the Crown violated the civil laws of the realm by inflicting on him at pleasure a military degradation. Against this act the Doctor has ever since appealed for redress to every constituted authority, but in vain. However, the General-Commanding-in-Chief, His Royal Highness the Duke of Cambridge, did inquire into the Doctor's case, and reported to the War Office on the 9th of September, 1857, "that, on military grounds, he saw no reason why redress should not be granted." But the War Office refuses to grant the Doctor the benefit of His Royal Highness's report in his favour, and, under these circumstances, he appeals to the House of Commons. Now, since every case of the sort has some weak points as well as some strong ones, let us point out frankly what are palpably the weak points in Dr. Macloughlin's case; because, even if the greatest stress possible be laid on them, they constitute no valid reason for refusing his claim for redress. His history is one of hearty, ungrudging, energetic service in the cause of humanity,—of generous self-sacrifice and devotion, which earned the commendation of his own superiors and of the prisoners whom the fortune of war threw under his care. He had been engaged in protracted service in the field, and on one occasion at least narrowly escaped with his life. But promotion did not come so soon as Dr. Macloughlin expected it; nor so soon as he, doubtless, felt that he had amply deserved it, and had honestly earned it, upon the terms on which he was induced to enter the service; whilst men less deserving, in his opinion, were promoted over his head. And so it appears that on the 7th of December, 1818, he had a very acrimonious interview with Sir James Macgrigor, in which he evidently taxed Sir James with untruthfulness, and in which he alleges that Sir James told him that his want of promotion was owing to his want of private interest. But Sir James denied that he ever made use of this expression; and here is the real weakness of Dr. Macloughlin's case. He engaged in a controversy in which the point at issue was the veracity of a man high in office and public estimation,—a controversy, in its very nature, not merely repulsive, but, we may say, not capable of being dealt with by gentlemen in any other way than by accepting the denial and treating the thing as a mistake. Then Dr. Macloughlin went on half-pay, and, six years afterwards, being called on for active service, refused to serve except on his own terms, and so was dismissed the service. And this dismissal was as ignominious as if he had shown cowardice in the field, inhumanity to the sick, or inefficiency in the general discharge of his duties. Now, let us grant, for argument's sake, that Dr. Macloughlin did show some want of temper and discretion in his conduct towards Sir James Macgrigor, and in his refusal to serve, without receiving the just reward of his past services, and we contend that these are just the failings most likely to beset men of the stamp calculated above all others for active service, whether in the strictly military or in the so-called civil departments of the Army and Navy. Men such as Guthrie, fired with a noble zeal for doing their duty, can least of all bear to see the honours of active service made contingent upon private interest, or on the arts by which the idle and luxurious hanger-on at Court, or Clubs, or *salons*, can clutch the reward of men who risk their lives in the field. If, then, it be pleaded that Dr. Macloughlin, like Lord Dundonald, was guilty of *indiscretion*, we throw the blame on that miserable system against which he rebelled, and which has proved fatal to others even stronger than he. We would observe, further, that it cannot be for the interest of the service that a veteran of the Peninsular war should be compelled, year after year, to petition for the removal of a stigma, which was an extravagant punishment for want of taste or temper, since the original fault was created by an unjust and immoral system of preferment, and ought now to be considered expiated by the grey hairs and undecorated breast of the veteran petitioner. That military etiquette is satisfied is evident from the sentence of the Duke of Cambridge. The War Office is now, therefore relieved from the necessity which the exigencies of the service or the claims of discipline might have once thrown on it of maintaining a punishment which is far too severe for the offence, supposing that offence proved, and, if proved, shown to be without the palliation of strong provocation.

On the 15th, Dr. Beale resumed his Microscopical Demonstrations at the Royal College of Physicians before a numerous audience. He began by showing the real structure of the liver, proving the continuity of the tubes which contain the liver-cells, and which constitute the substance of the lobules, with the hepatic ducts, and thus bringing the structure of the liver into harmony with what is known of other secreting glands. Having sent round a specimen of healthy liver, prepared with the peculiar method of injecting which he has brought to perfection, he dilated on the extreme value of various manipulations for the purpose of rendering evident what the structure of tissues really is. Thus, he showed that what, when uninjected, looks like areolar tissue, may be proved by injection and colouration to be composed of far more definite material. Thus, cirrhosis of the liver is usually considered to be due to an exudation of inflammatory lymph, producing a thickening of the areolar tissue, which is assumed to exist naturally between the lobules, and which has received the name of Glisson's capsule. Careful preparation shows, however, that the assumed Glisson's capsule consists of blood-vessels, the existence of which is not shown in unprepared specimens, and that there is no areolar tissue. It shows, likewise, that the enlargement of the interlobular spaces is not due to a development of areolar tissue, but to a wasting of the secreting structure, which begins at the circumference of each lobule. The circumferential origin of the morbid change probably depends on the fact that the outside of the lobule receives and deals with the portal blood containing unhealthy products of digestion before that reaches the centre of the lobule. Having thus demonstrated the secreting structure of the liver, which really consists of tubes and blood-vessels, in as close apposition as possible, Dr. Beale passed on to some conclusions to which his researches had led him, concerning the origin and nature of ozonised living matter. He believes that it consists in its earliest stage of spherical particles of the extremest minuteness. That which appears to a common microscope, with a one-fourth inch object-glass, magnifying 220 diameters, to be a simple spherule, is seen under higher powers (and especially under the monster $\frac{1}{25}$th glass, which magnifies 1700 diameters) to be composed of smaller spherical particles, and these of others, and Dr. Beale believes the subdivision to be carried on till the imagination cannot conceive of their minuteness. Organised matter in this state—or, in other words, germinal or formative matter—has the peculiar property of being stained by an alkaline solution of carmine, and of retaining the stain after it has been washed out from the *formed* or devitalized material. A certain quantity of germinal matter constitutes an elementary part. It grows from the centre to the circumference, and (if we understood Dr. Beale aright) the process of growth and movement outwards creates currents in the adverse direction, which bring fresh nutrient matter to the centre. Nutrient matter is necessarily in a state of solution, and one property of living matter is to attract out of any solution that which is fit for its own

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purpose and can be incorporated with its substance. Some elementary parts have a definite boundary in the shape of a cell wall; others none. What is called the nucleus is always composed of germinal matter. It appears to perform the function of an *ovum*, or reservoir of vitalised matter, capable of maintaining its properties under injury, and so of setting on foot processes of repair. The proof of these doctrines is based on the observation, that the quantity of matter capable of being stained with carmine (by hypothesis the *germinal*) is universally greater in young and growing tissues than in such as are older and perfectly formed; for example, in the tissues of young animals, in the deeper layers of the skin, and in the central parts of nucleated cells. So that the exterior portion of elementary parts is formed out of, and at the expense of, the interior germinal matter. How long any elementary part may live without being oxidised, absorbed, or removed is doubtful, although the duration is certainly very various under various circumstances.

The Irish Registration Bill has been referred to a Select Committee of the House of Commons. This, then, is the opportunity for protesting against any provisions which may throw additional unremunerative work on Members of our Profession, with penalties in case of non-compliance. To exact labour without remuneration is unjust on the face of it. The want of a registration of deaths in Ireland has induced the Registrar-General, in conducting the present Census, to demand a return of all deaths in families and public institutions during the last ten years. This is a serious addition to the work of resident Medical officers at public institutions.

Some of the Irish newspapers have made a fierce attack, after their manner, on Dr. Budd, on account of his having made a will for a dying man, by which the testator bequeathed his property in a manner not approved of by newspaper writers. The facts of the case are, however, very simple. Dr. Budd, called, in the middle of the night to a patient at the point of death, who was perfectly clear in his intellect and desirous of making a will, made that will, at the patient's desire and according to his directions. Unluckily, the person to whom the property was bequeathed was his mistress. His family, therefore, were indignant, and are trying to upset the will. We believe that it is a true act of charity in the Medical attendant always, when a patient is dangerously ill, to suggest that he should settle his affairs, both worldly and spiritual, and that he should have the benefit of legal and clerical counsel. But, in the absence of the attorney, the Physician need not hesitate to make the will. In the present case, the desire to make a will was spontaneously expressed by the patient, and not suggested by Dr. Budd, although he would have done his duty had he suggested it.

The love of life is one of the strongest faculties of the human mind. It must be so, for the sake of the preservation of the species. Suicide is, therefore, not merely criminal but unnatural. Yet it may be extenuated under the pressure of dire calamities, such as may crush the strongest power of endurance. There must, however, be something radically wrong in a state of society in which suicide is resorted to from mere sentiment or caprice, or to escape enemies, or the petty annoyances inseparable from active life; and, still more, when it is treated by regularly-constituted tribunals as no crime at all. These remarks are drawn forth by that almost incredible French story of murder and suicide which we find in this week's newspapers. A French corporal, on leave of absence, with a thousand francs in his pocket, formed a *liaison* with a girl aged 17. At last his term of leave and his money were exhausted, and he told his mistress (to whom, by-the-bye, he had lied most foully as to his real status and property) that they must part. "Then I shall go to the Morgue," was her reply. So they agreed to die together, and to signalise their death by the union of sentiment and sensuality. "We shall go," said the Corporal, in a letter intended to be read after his death, "to a ball; thence to the Cadeau Bleu, and thence, amid the tumults of a last embrace, and after our heads are a little heated by wine, I shall plunge a poniard into the bosom of my beloved, right to the heart, and then kill myself." Accordingly, after supper, Denise lay down on a sofa, undid the upper part of her dress, and bared her bosom. Rouard then, pushing up her left breast, and feeling for her heart, plunged in the dagger up to its hilt. He next performed the same office for himself, but not so resolutely. After fainting, he came to himself, felt an acute pain in his breast, and found the poignard sticking there; so, he drew it out, and tried to "collect his ideas." Poor Denise survived twenty days, and Rouard has recovered, has been tried, and has been acquitted, amid the applause of the by-standers; on the plea, we suppose, that he was justified in kiling Denise at her own request, and in killing himself rather than return to his duty, and that a horrible romance, in which the "monkey and tiger" elements are duly represented, comes home to the heart of a Frenchman.

All our readers must have heard of the most heart-rending accident at Dublin, in which an omnibus fell into the lock of a canal, and seven or eight inside passengers lost their lives. But perhaps they do not know that when the omnibus first fell in it was not covered by the water, and that the lock-keeper on coming, instead of letting off the water out of the lock by the lower sluices, let fresh water in by the upper sluices, in order, as he said, to "float the 'bus!" By this act, the vehicle and its inmates were entirely and hopelessly submerged, and the two or three minutes which made the difference of life or death were hopelessly lost. The Coroner said no blame was attributable to the man, as he did his best; but the case makes us wish for a little more spread of education and knowledge of common things.

On Friday evening, at the Royal Institution, Professor Helmholtz delivered a discourse on the doctrine of Conservation of Force, applied to Organic Nature. Force, he observed, is never lost. Every body possessing the power of effecting an alteration in other bodies, becomes itself exhausted, but creates other force capable of effecting as much alteration as itself had caused. So force is employed in raising a weight to a given height; and if the weight be multiplied by the height, we have an expression of the power it may exert in moving or raising other bodies; but the weight so raised to a given height, cannot exceed its own weight multiplied by the height to which itself was raised. So the force employed in giving velocity to a bullet, is reproduced in the resistance overcome by the bullet, and that employed in bending a spring or cross-bow, is kept as in a reservoir, ready to be discharged suddenly in the case of the bow, or to be gradually exerted in overcoming the friction of wheels in the case of the watch. In the steam-engine, heat plays the part of the force which bends the spring, therefore heat is a motive power. But if heat causes motion, it is expended in so doing, whilst conversely it may be reproduced by friction and other applications of mechanical force. The mechanical work done by heat may be measured by comparing it with the quantity of heat required to raise one pound of water one degree Centigrade; and this quantity of heat will lift a pound of water 1411 English feet; therefore the mechanical equivalent of heat equals 1411 English feet, and a force equal

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to this must be employed to produce that amount of heat. But if mechanical force result from heat, and heat from chemical attraction, then the force of attraction between carbon and oxygen is equivalent to mechanical force, and may be expressed in *foot pounds*, *i.e.*, weight multiplied by height. All force remains the same in quantity, no matter in what particular *form* it may be exerted. When matter existed in a universally diffused nebulous state, the only existing force was attraction: when nebulæ coalesced into solid masses, heat was produced. When the velocity of falling stars is checked by our atmosphere, motion is changed for heat, and they become luminous. The greatest source of force on the surface of the earth is the solar beams, which are apparently lost in producing vegetation, which yet becomes a reservoir of force for animals. During hard work, as at the treadmill, five times as much carbon is consumed as when the body is at rest; and of the extra four parts, says the Professor, one part is expended in mechanical work. In any thermodynamic engine the mechanical force obtained is only one-eighth, and seven-eighths are lost in heat. Increased research shows the living body to be subject to the ordinary laws of matter, acting under peculiar conditions; and although some persons may think that there is a want of dignity in resolving "vital" actions into chemical and mechanical, yet that mode of treatment alone is likely to lead to sober, practical, truthful ideas in physiology.

One of the Surgeons to the Guernsey Militia has received a circular from Dr. Francis Hawkins, Registrar under the New Medical Act, informing him that by the 36th Section of that Act, "No person can hold an appointment as Physician, Surgeon, or other Medical Officer either in the Military or Naval Service, unless he has been registered under this Act." The reply is, that he and his colleagues have already tendered their resignation, because compelled to have a homœopath for a colleague; and that their resignation has not been accepted.

A correspondent asks if we can suggest any means of checking the practice of distributing the filthy hand-bills and publications of quacks in the public streets? It is a matter in which the Commissioners of Police might be applied to, in the interests of public morality.

REVIEWS.

The Physical Examination of the Chest in Pulmonary Consumption and its Intercurrent Diseases. By Somerville Scott Alison, M.D. Edin., Physician to the Hospital for Consumption, etc., Brompton. 8vo. Pp. 447. London: 1861.

This is by far the most complete and exhaustive Treatise on the Physical Diagnosis of Phthisis that has yet issued from the English press. Every sign hitherto described has received from our author due recognition, and has been subjected to the test of clinical observation; the advantages which Dr. Alison has possessed as Physician to the Brompton Hospital having been efficiently used and applied to this work.

"The most important signs, in a practical point of view, have been particularly regarded; but no ascertained sign of pulmonary consumption has been altogether omitted," the author justly believing that each one "must be full of interest to the Physician—the enlightened Physician of these days,—even when leading to no immediate and obvious practical advantage."—Preface.

When describing each sign Dr. Alison discusses its mechanism, and points out its value in the diagnosis of Phthisis by a consideration of its peculiarities and the conditions of its occurrence in other forms of disease. But the most original feature of the work is the introduction of the author's observations with the differential stethoscope, an instrument of his own invention and one which, when once the Practitioner has familiarised himself with its use, is calculated greatly to assist in the discrimination of morbid and healthy sounds. In its essence this instrument consists of two flexible stethoscopes so arranged that each may conduct the sounds entering it to a separate ear. In this way it is evident that by rapidly alternating their use the sounds proceeding from different parts of the chest may be rapidly compared, and more satisfactorily than by the ordinary mode of comparison, where the memory must be entrusted with the custody of an impression, until a period of time has elapsed sufficient to allow of the re-adjustment of the stethoscope to a different part of the chest. But the most interesting and original application of the differential stethoscope is when it is employed to different parts of the chest simultaneously, the sounds being conducted by one instrument to the one ear and by the other to the other ear. The value of its use in this way depends on the following facts:—

"1. That sounds of the same character are restricted to that ear into which they are conveyed in greatest intensity; and 2, That sounds differing in character may be heard in the two ears respectively, even if they be made to reach the ears in different degrees of intensity."—P. 401.

It follows that if a sound of high intensity from one part of the chest is conveyed to one ear and another sound of low intensity, but of the same character, is conveyed to the other ear at the same moment, the only sound heard will be perceived by the ear to which the louder sound is conveyed, the weaker sound being completely lost or "eclipsed." A moderate but decided difference of intensity is all that is requisite for this phenomenon to be elicited. Where, however, the sounds are different in character as conveyed by the two stethoscopes, the one ear will perceive the one, and the other ear the other.

Further, "it is possible to analyse a compound sound, or one composed of two sounds, and to divide it into its component parts. . . . It is only necessary that the two sounds of which it is composed may be respectively heard at certain points, in greater and lesser intensity, and that the respective caps of the stethophone may be placed at these points. . . . For example, a compound sound composed of the two sounds of two watches placed together upon a table, with the unassisted ear is distinctly heard in its compound state, and cannot be divided into its two constituent parts. With the stethophone this is readily done. One cap is placed where the sound of one watch is in greater intensity, and the other is placed where the sound of the other watch is in greater intensity, and the result is obtained of one watch only ticking in one ear, and of the other watch only ticking in the other ear."—(P. 401.) We shall see the application of these facts as we proceed with our review.

The work is divided into three parts. The first treats of the physical signs observable in the several stages of phthisis separately: the second consists of practical directions for making a physical examination of the chest, and the third consists of a reprint of several monographs connected with the subject and contributed by the author to this and other journals.

And here we must state that "physical signs," as Dr. Alison understands the term, embrace much more than the evidence afforded by inspection, percussion, and auscultation of the chest. In the work before us the term is used co-extensively with what have been elsewhere denominated "objective phenomena." It consequently embraces the subjects of cough, the state of the throat, gums, tongue, etc. We believe that our author is scientifically correct in so doing; and the reader of his book has consequently presented to him a history of the symptoms of phthisis complete with the exception of a limited number of subjective signs. It is questionable whether Dr. Alison might not have included in his enquiry yet other symptoms without transgressing the strictly philosophical limits of his subject. Dr. Alison writes, "If the question were proposed to me, whether in the case of a patient supposed to suffer from pulmonary consumption I would be disposed to regard as the more decisive of the question, evidence afforded by symptoms, or that given by the physical signs ascertained by the examination of his chest, I would reply, that I should much prefer the physical signs as the ground upon which to form my judgment."—(P. 1.) Still it is not to be forgotten that in the very earliest period of tubercular disease the signs may be little decisive and certainly re-

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quire to be interpreted and weighed by the assistance of the general symptoms also presented by the patient.

The first eighteen chapters of the book are occupied by the signs of the first stage of phthisis therapeutically considered, or rather considered with a view to arrest and cure, this is the stage which will ever most deeply interest the practical Physician. It would be a hopeless task, even here, for us to follow our author chapter by chapter, we shall therefore content ourselves with alluding to some of his views and especially by calling attention to those signs which he has been the first to describe as elicited by the use of his differential stethoscope.

The explanation which Dr. Alison gives of the mechanism of "harsh" respiration is that it is "due to the increased resistance which the air drawn into the larger bronchial tubes by the expanding cavity of the chest, has to overcome in the terminal bronchi, in passing into the ultimate vesicles, through the presence of surrounding tubercles, and to the resistance offered to the expansion of the cells themselves, partially filled, as many of them are, with tubercle corpuscles, and by the presence of surrounding vesicles laden with that material." —(P. 9.) Bronchial respiration, or bronchnæa, as he terms it, he explains to be "produced by the motion of air passing in and out of tubes, bronchial tubes, varying in size from a quill to the little finger."—P. 36. When he comes, however, to speak of the bronchial voice he explains this phenomenon much in the same way as Skoda does, namely, by referring it to consonance. That the first explanation, that we mean of harsh respiration, is correct, we are not disposed to question; but in respect to the bronchial respiration, the character of which is peculiar, resembling the character of the bronchial voice, we very much prefer to adopt an explanation which will account for this fact, and to refer it, with Skoda, to the same phenomenon of consonance which our author adopts in respect of broncophony. We must observe, however, that while, with Skoda, Dr. Alison maintains, in opposition to Laennec, that solidified and condensed lung is not a better conductor of sound than vesicular lung, yet he considers "that the acoustic advantage of increased resonance in the case of lung solidified by means of tubercle, is aided in producing thoracic voice by the principle that one solid body transmits sound better to another, than an adriform body transmits it to a solid body." This is a principle which he believes "has not been previously noticed in thoracic acoustics." We think Dr. Alison is in error here. Dr. C. J. B. Williams, in 1840, wrote thus:—"Bodies of very different density and elasticity do not readily receive sound from each other; because their powers of motion differ in force and extent, and cause them to reflect, or to choke each other's motions. Thus, a sound produced by air is intercepted by a solid; and that produced by a solid is transmitted by a solid of the same density and elasticity far better than by air" (a).

On the "wavy" respiration of Dr. Theophilus Thompson our Author seems to place but little reliance, even when it proceeds to the extent of being "divided," or "jerky." The heading of the eighth chapter is as follows:—"Sonorous and Sibilant Rhonchi—Dry and Humid Crackle or Clicking—Humming—Buzzing—Arrowroot Crepitation—Wool or Yarn Tearing Sound—Rolling Sound—Pleural Sounds—Crepitation, Fine and Medium." Now, we have no doubt, all these sounds may be heard, but we cannot read over such a list without a sigh, that anyone should think it necessary thus to refine. Of course we do not allude to the first and last few signs in the list. We much prefer Skoda's "indeterminate," as applied to some of the others.

But we have said nothing yet about the application of the Author's differential stethoscope in the first stage of phthisis. He finds an use for it very early in the disease. He believes the "harsh" respiration best dealt with thus, applying the sound-receivers to a healthy and to the suspected part in rapid succession, and then, as the deposition of tubercle progresses, and the harshness increases, "if the differential stethoscope be employed with one sound-receiver over the diseased part, and the other over a healthy part with normal soft respiration, simultaneously, this latter sound is lost, or tends to be lost, and the only sound heard is that of coarse, harsh respiration, communicated to the ear connected with the diseased part. . . . For this result a decided loudness must exist."—(P. 7.) Again, the instrument is applicable to the determination of simple deficiency in respiratory murmur, since, in this case, the respiratory sound is heard at the healthy part, and is inaudible over the diseased, the reverse of what occurs in cases of harsh respiration; and it also gives very satisfactory results both in respect of undulating and divided respiration Prolonged expiration sound also is well thus ascertained: when both cups are employed simultaneously, "the sound continues to be heard in the ear connected with the morbid part after the sound has ceased to be heard in the ear connected with the healthy part. . . . If the inspiration sound of the diseased side be defective and feeble, and without the adventitious bruits of rhonchi and crepiti . . . the inspiration sound is heard only on the healthy side, and hence, in such a case, we have inspiration sound only on one side, and expiration sound only on the other (or diseased) side, which really form very curious and remarkable acoustic phenomena."—(P. 25.) This "oscillatory" respiration Dr. Alison has observed in many hundred examples of phthisis, but, so far as he can remember, *in no other form of disease.*

The behaviour of the breath sounds, as heard with the differential stethoscope, where bronchial respiration (bronchnæa) is present at any part, and the collecting-cups are applied to the healthy and diseased part simultaneously, is highly interesting. We cannot do better than quote our Author:—"The vesicular full respiration sounds conveyed to our ear eclipse simple, quiet bronchial respiration sounds conveyed simultaneously to the other ear in the same manner, and as effectually as full vesicular respiration sound eclipses defective vesicular respiration sound, as has been already described. . . . When, however, the bronchial respiration assumes a blowing, loud, whiffing character, which it occasionally does, much more frequently, it is true, in the third stage of phthisis than in the first, it effectually eclipses the vesicular respiration of the sound lung if this be not particularly loud. The loud sound of blowing, tubular respiration heard through one ear, and the absence of sound in the other ear, convince the mind at once that a very serious difference in the conditions of the two lungs exists."—(P. 35.) In the detection of difference in the intensity and character of vocal resonance at two parts of the chest, the method of using the instrument is this:—"Place the two cups on the two different parts at the same moment; if the voice be materially greater at one part than another, the ear connected with that part seems the only one through which the observer hears. If the difference be not material, then it is best to apply the cups in succession . . . a very minute difference may thus be clearly appreciated. The difference, now strongly revealed to the mind, both in intensity and in character, may be entirely overlooked by an auscultator employing the common wooden stethoscope."—(P. 54.)

The eleventh chapter is entirely devoted to the results of Percussion of the Chest in the First Stage of the Disease. The Author, however, expresses his conviction—a conviction which we fully share with him,—that long before its revelations can be procured "auscultation has already rendered most important services in the detection of tubercular deposition. From numerous observations which I have made upon tubercular deposit and its associated percussion sounds, I am strongly of opinion that it is not until the air has been reduced one-third below its normal amount, that the alteration of the percussion gained in the direction of dullness attains to that degree that may with safety be relied upon. When the deposition and infiltration are such as to bring down the amount of air to one-half, there is recognisable a decided dulness, and when the air is all but absent, or altogether banished, we have then absolute dullness."—(P. 71.)

It is a common notion that narrow-chested persons are specially liable to tuberculous disease. Dr. Alison says, "Comparatively few greatly distorted chests are seen among phthisical persons; I believe not more in proportion than are found in persons not suffering from phthisis. I have met the greatly distorted chest, the greatly gibbous back and sternum of rachitis, in not more than some six persons suffering at the same time from decided phthisis; while among this number of six thousand, I have seen the distorted chest in at least some dozen suffering from severe dyspnœa and bronchitis. The finest specimens of the human thorax I have constantly seen associated with tubercular disease of the lung, and I believe that persons having this development are not materially less liable to phthisis than others."—(P. 96.)

(a) "Pathology and Diagnosis of Diseases of the Chest." Fourth Edition, p. 11.

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We cannot refrain from quoting an observation of our author which, trite as it is, contains the germ of much of our diagnosis in phthisis, no less than in other maladies. Speaking of the thoracic signs, he says, "they seldom appear for a considerable time, except in the society of each other." Is not this association not only of physical signs among themselves but of physical signs with general symptoms, the basis of much of our interpretation of these signs, both as regards the disease they indicate and the very anatomical condition of the lung which originates them? This question is not new. Skoda in substance asks the same, and we raise it anew now because Dr. Alison asserts, like most of his predecessors, that "the pectoriloquy of a cavity usually presents characters in itself which serve to distinguish it from bronchophony." Perhaps it does when the extremes of both varieties of sound are contrasted; but practically, we ask, are we not guided in our estimate of the condition of the lung in most cases of the kind by the other phenomena present, the history of the case and the ascertained or suspected stage of the disease?

Although desirous of giving as full a consideration as possible to this excellent work, we must pass over those chapters which refer to the signs of the more advanced stages of phthisis, merely remarking that Dr. Alison has thought proper to elevate the accident of "perforation" into a "fourth stage" of the disease. Practically this is of little moment. The reason he adduces is, that "perforation is a natural consequence of progressive excavation," and would be unavoidable were it not for pleural adhesions; besides which, he believes it occurs far more frequently than is supposed, and that it is frequently not recognised because it occurs when the patient is very ill, and when, consequently, the Physician is little disposed to disturb him for physical examination.

There is nothing very novel in the "Practical Directions," given in the second part of the work, for the physical examination of a consumptive patient. He very properly insists upon this, that "the very fact that a patient seeks advice on his own account, or that he is sent to us whether by professional or non-professional parties, should constitute in our minds a warrant for full examination. This should hold in even apparently trivial cases, for it often happens that apparently very trivial cases are really very serious ones."—(P. 297.)

He insists that the examination should be made early, if possible at the first interview, and that, at any rate, we should abstain from pooh-poohing our patients', or their friends' suspicions until our minds are fully instructed. He dwells upon the importance of all the accessories to a thorough examination,—a front light, a proper temperature of the room, posture, silence, etc. In percussion he prefers, as most practised Physicians do, the pleximeter and hammer which kind Nature has provided us with, and which are always "handy." Nevertheless, he describes at length all the instruments invented both for this purpose and for auscultation, measurement, etc., whether by his predecessors or himself.

But we must really draw this notice to a close, although with reluctance; for there is a great deal more we should like to have said about the book. It is not a book for a student at the Hospital, but it is one which should be read and carefully studied by every Practitioner of Medicine. The former would be confused, the latter, if accustomed to clinical observation, will be instructed, for he will recognise in its pages lucid descriptions of signs with which his experience has already made him familiar, he will receive new ideas as to their origin and meaning, and will gather practical hints of daily application. In conclusion, we will simply say that Dr. Alison has written a book worthy of the name—the distinguished patronymic—which he bears.

DECOLORISATION OF IODIDE OF STARCH BY HEAT.—This, says M. Baudrimont (*Comptes Rendus*, t. li. p. 827), depends upon the volatilisation of the iodine, and the re-coloration of the liquid on cooling is caused by the re-solution of the vapour of iodine which will remain on the surface. This is proved by heating some iodide in an open capsule, and blowing on the surface, after which the solution does not become coloured again on cooling. But if the iodide be boiled in a small flask, from which the vapour cannot so easily escape, the solution does become coloured on cooling. Further, when heated in a sealed tube, without air, the solution does not decolorise.

FOREIGN CORRESPONDENCE.

PRUSSIA.

BERLIN, March 30.

PROFESSOR TRAUBE ON THE EFFECTS OF INHALATION OF CARBONACEOUS MATTER INTO THE LUNGS.

THE question whether fine particles of carbonaceous matter, which penetrate into the interior of the respiratory organs in persons habitually occupied in smoky rooms or mines, may produce irritation, ulceration, and other morbid changes in the lungs, has not yet been satisfactorily settled. Dr. Pearson was the first to direct the attention of the Profession to this subject; it was afterwards studied by Drs. Gregory, Christison, Carswell and others, who have described cases of this kind in which the lungs were ulcerated, and even partly broken down into irregular excavations; but it was not shown whether these changes were due to the mechanical action of minute particles of soot and coal-dust, inhaled during the inspiration of air loaded with such matters, or to the chemical effect of those substances which Dr. Angus Smith has shown to be contained in coal. I shall, therefore, relate a case of this kind which was lately observed in the clinic of Professor Traube, as it throws considerable light upon this and other parts of the question.

A working man, aged 54, was received into the Charité Hospital for dyspnœa, cough, and hydrops. He said that he had for the last twenty years suffered from cough and whitish sputa; dyspnœa had also existed for some years, and was especially troublesome after great bodily efforts. Three months and a-half ago his legs began to swell, and the cough and dyspnœa increased to such a degree that he could no longer continue to work. He was then received into the Hospital, where in consequence of diuretics having been given the symptoms decreased, and he was dismissed; but immediately afterwards the cough, dyspnœa, and swelling again became so much worse, that he was obliged to return to the Charité, where he was received into Professor Traube's ward.

The skin of the face was of an ashy hue; that of the body had a bluish appearance, especially so at the lower extremities. The latter were much swollen, the scrotum less so. The thorax was abnormally arched; the respiration of an almost purely abdominal type, as the ribs showed very little movement, while that of the diaphragm was very considerable, and that of the scaleni moderate. The sound was dull on the back, in the lower thirds of both lungs, and here the murmur was extremely feeble and indistinct; now and then a soft *râle* was to be heard, while at the front of the chest distinct vesicular murmurs and whistling were perceptible. The cough was more frequent if the patient was in a horizontal position, and he was, therefore, more troubled by it at night than in the day time. The sounds of the heart were distinct, but its impulse was not to be felt; the percussion sound in the region of the heart was almost as sonorous as on the right side. The heart's action was irregular; the radial arteries were atheromatous, their walls thickened, the pulse small; generally between 100 and 120. The left internal jugular vein, the lateral and anterior external jugular veins, and the veins in the skin of the thorax were much swollen; the right saphena was obliterated, and formed a thick, solid, cylindrical cord. The tongue was bluish, cool and moist; ascites and a certain amount of meteorism were present. There were forty inspirations, and the temperature was at 98° F. The expectoration consisted of a mucous fluid with a large number of grey and yellow flocks of variable shape, dotted with black. If the black particles were examined by the microscope, large cells of the size and shape of the epithelial cells of the lungs, filled with black molecules were seen, also small cells of the size of mucous globules, containing black matter; besides these there were groups of black particles not contained in cells, and mixed with them some brownish and reddish particles; finally there were a few red blood globules which had become rather pale. The shape of the black particles was pointed and angular, but very irregular; some of them looked like the hooks of echinococcus, others like the cells and canals found in different parts of the wood of *pinus silvestris*. This circumstance, as well as the con-

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siderable size of some of these particles, led Professor Traube to think that they did not consist of black pigment, but of inhaled carbonaceous matter. When questioned on this particular, the patient mentioned that he had for the last twelve years been employed in carrying charcoal; that he had in this business been constantly in an atmosphere filled with such dust, and had often expectorated black sputa. The expectoration amounts now to four ounces per diem.

In the week after admission the dropsy increased, and the paroxysms of coughing were very troublesome. At times the patient was obliged to sit up in bed (orthopnœa). During these fits the cyanosis increased so much that the face and neck became quite purple. Although the patient had a good appetite, he ate only very little, as he feared to increase the tension of the abdomen. The bowels were opened from four to five times every twenty-four hours. The quantity of urine was very small; it was of a dark-brown red colour, and formed a sediment.

After the patient had been in the Hospital for about a week and had been treated with a blister on the chest, the extract of nux vomica, and afterwards an emulsion of gummi gutti, the following singular affection in the skin and the cellular tissue in the upper part of the right side of the chest was observed:—Between the shoulder and the sternum a large red spot appeared, which was raised above the level of the healthy skin; part of this was of a darker colour and did not disappear on pressure, while the other part was lighter, and vanished when pressed. This tumour spread during the following days, beyond the right shoulder-blade and over the right arm, and was accompanied with considerable pain; but it decreased, and disappeared entirely some days afterwards. At the same time the cough, dyspnœa and hydrops diminished, and the case showed altogether a favourable aspect, when the patient, about a fortnight after admission, was attacked by erysipelas in the left thigh, which soon spread over the cellular tissue of the whole extremity. In a few days large blue and black spots appeared; the skin became gangrenous and fell off; at the same time the patient complained of fulness in the head; he was sleepy and insensible. Deliria and coma supervened in the last days, and death ensued about a month after the patient had been admitted into the Hospital. During the last fortnight the expectoration had become very trifling, and had entirely ceased four days before death took place.

The post-mortem examination gave the following results: The pericardium and the heart were almost entirely united to each other by a thick mass of newly-formed connective tissue, in which some small tubercles were found. There were two gaps in the two layers, of which the mass of connective tissue consisted; and these were filled with dry and hard fibrine. The heart was scarcely enlarged, the right ventricle somewhat dilated and hypertrophied. The muscular substance was rather lax and dark brown; the valves of the aorta were thickened and somewhat shortened, and two of them had grown together.

In the sacs of the pleuræ there was a moderate quantity of bloody fluid. The lungs adhered in many places to the parietal pleura, and showed considerable exudations of fibrine, tinged with blood, in their inferior parts. Both lungs could be inflated, with the exception of the left inferior lobe, which was diminished in size, and mis-shapen. Two small places were emphysematous. Beneath the pleura there were large groups of black spots, which were distinguished from the common pigment spots by not being arranged according to the course of the intercostal spaces, and by not being circumscribed in the upper lobes. On cutting into the lung, which was soft and smooth, it showed a uniform black colour; on pressure, a black serous liquid oozed out, which blackened the fingers. In this liquid, the same black and red particles of varied shape, which had been seen during life, were found; round corpuscles of various size, some of which were five or six times larger than common epithelial cells of the lungs, and consisted of a thick mass of black particles; some cells of equal size and shape with the epithelium of the lung, which contained a nucleus and several black particles, and finally groups of normal epithelial cells were distinguished.

Professor Traube had no doubt that these black and red particles were charcoal; because they differed in every way from the pigment molecules, which are constantly found in the lungs of adult persons, and also in the expectoration of patients suffering from catarrh, pneumonia, and melanotic phthisis. The pigment-molecules are always enclosed in cells; they are very small, and are never of an irregular and angular shape. Besides a comparison with the red and black particles in the expectoration with the dust of the material, to which the patient had been habitually exposedin his avocation for twelve years, showed that both were the same. Besides, the cells of the wood of *pinus silvestris* show also an equal shape. It is not difficult to explain why red particles should also be observed, as the colour of the latter is due to their not being perfectly converted into charcoal, as the black ones are. It is easy to produce the same difference of colour in a piece of paper or wood, according as it is more or less burnt.

The inhaled particles of charcoal which penetrated into the tissue of the lungs, did not produce any marked alteration in them; neither macroscopic nor microscopic observation showed a fresh formation of connective tissue, suppuration or ulceration; and it is therefore evident that purely mechanical irritants are not in themselves sufficient to produce inflammation in the lungs. It is true that abscesses are formed, if globules of mercury enter the minute vessels of the lungs, after having been injected into the veins. But this cannot be considered a valid objection to the principle just put forth, because it is well known that oxygenation on the surface of the mercury easily takes place, and the globules might thus have a chemical as well as a mechanical effect. Professor Traube therefore thinks that the indurations and destructions, which have been found in the lungs of coal-miners, are probably not produced by the mechanical action of the accumulated particles of coal, but rather by the different chemical matters which are contained in it, and which are not found in charcoal.

The fact that the epithelial cells of the lungs contained particles of coal, which was proved before and after the death of the patient, is also of importance. It is thus shown that foreign bodies may penetrate into cells without destroying or inducing perceptible changes in them. It is easy to show how this intussusception was brought about. The particles which enter the lungs with inspiration, arrive in the air-cells with a certain rapidity, and as they are pointed they have no difficulty in piercing the walls of the cells.

Another question is, which of the symptoms described were due to the presence of charcoal particles in the parenchyma of the lungs? On admission the patient stated that he had for the last twenty years suffered from cough and expectoration; and as he was only occupied in carrying coals during the last twelve years, these phenomena can only be ascribed to a simple catarrh, which had been present before. The disease by which the patient was attacked three months and a-half before admission, was shown at the post-mortem examination to have been pericarditis, followed by double pleurisy. This evidently produced the orthopnœa, the irregularity in the action of the heart, the change in the urine, the cyanosis, and the dropsy, for all these are symptoms which are observed in cases of slow pericarditis. The only symptom, therefore, that might have been produced by the accumulation of charcoal particles in the lungs, was the peculiar cough, which is to be explained by the increased secretion of liquid in the air-cells, as particles of carbon continually penetrated into the bronchial tubes, and on account of their pointed and angular shape, acted there as irritants upon the mucous membrane. The cessation of the cough during the last few days before death is probably to be ascribed to the circumstance that in consequence of an increased secretion in the intestines the abnormal secretion in the air-cells was arrested.

It may be asked whether the being constantly occupied in a dusty atmosphere is in itself sufficient to produce an accumulation of small corpuscles in the air-cells. If we consider how many persons live permanently in such an atmosphere without showing any symptoms of a morbid state of the respiratory organs, the supposition becomes justified, that other causes must contribute, if such a result is to be brought about. The circumstance that the patient already suffered from bronchial catarrh, when he was first employed in the coal-wharf, seems to show that a disturbance in the motion of the ciliated cells was this other condition; and that, probably, the motion of the cilia is in such cases prevented by a coating of mucus, with which they are enveloped; or their function is disturbed in consequence of deficient nutrition in the cells, in which they are planted.

The condition of the lungs in this case was somewhat

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analogous to that described as "black œdema of the lungs." This is a very rare affection, as Professor Traube has only seen three cases of it. In all of these, not only was the parenchyma of a uniform black colour, but also the liquid was black which oozed from the cut, and this justifies the supposition that the colouring particles are loosely distributed in the air-cells. It is possible that the black œdema of the lungs may be caused by engorgement of the air-cells with coal-particles.

DR. LANGENBECK ON A NEW RESPIRATOR FOR MEDICINAL PURPOSES.

Dr. Langenbeck, of Hanover, has recently constructed a new form of respirator to be employed in various diseases, in which he intended to bring remedies into direct connexion with the lungs. This instrument differs from the common respirator, as it does not cover the mouth outside, but is carried in the mouth. It may be used as a protection against cold air; but the principal purpose for which it is constructed is, that remedial substances, which are enclosed in it, should act directly upon the diseased lungs, on the blood, and the nervous system. This respirator consists of a hollow globe, made of box-wood or ivory, which is a little flattenedsuperiorly and inferiorly, and whose diameter varies from three-quarters of an inch to one and a-half inches. It is made in two pieces, so that it may be filled with medicines, which are inhaled through six or eight little holes bored anteriorly and posteriorly. The instrument is either placed upon the tongue between the rows of the molar teeth, and is thus totally hidden in the cavity of the mouth, or the anterior part of it is taken between the lips, in such a manner that it is nearly concealed.

The medicines used must, of course, be such as can penetrate into the air-cells in form of vapours, without being too irritating for them. The solid matters, such as herbs, extracts, resins, etc., are put into a thick covering of gauze; the fluid and oily remedies are soaked into a piece of flannel or charpie, before they are placed in the respirator. Dr. Langenbeck has made the following observations in regard to the local effect of the medicinal respirator upon the tissue of the lungs. In hæmoptysis the respirator was filled alternately with ice and strongly-smelling tan, such as is used for making leather, and sometimes a little acetic acid, much diluted, was added to it. The effect was very good, as the hæmoptysis did not recur. In such cases the respirator ought to be used at home for about an hour per diem; and, if the air is rough and cold, it should also be used during the time that the patient is out of doors. In tuberculosis Dr. Langenbeck has advised the use of the respirator filled alternately with ice, diluted acetic acid, tan, Russian leather, and unrefined cod-liver oil, and he says that he has seen the disease arrested in consequence of this treatment. He recommends this proceeding especially for such patients as are returned from a mild southern climate to the rough breezes of the north. In cynanche he has seen great relief of the inflammatory symptoms from it. In catarrh the expectoration was induced, if the flowers of chamomile and elder, and a drop of the oil of anise was inhaled. Copaivah and Peruvian balsam seemed also to be of great benefit in chronic catarrh.

In fever, great relief is derived from the inhalation of ice and diluted acetic acid. In typhoid fever, if coma occurs, etherial remedies and small doses of musk are useful. In whooping cough and spastic conditions, observed in children, chloroform and ether enclosed in the respirators are of benefit; or, if there is great weakness of the nervous system, asafœtida, ambra, acetum aromaticum are inhaled, and will restore strength. In dyscrasias, Dr. Langenbeck thinks that by the same means the condition of the blood might be improved. He has, up to the present time, only experimented with iodine in this respect, as this is volatile at the usual temperature. He has done so in a case of scirrhus of the breast; he removed a mass as hard as stone, which already reached as far as the axilla, with the intention to act afterwards upon the blood by means of iodine. He had until then quite given up operating in cases of cancer of the breast, as he always saw relapses, sometimes even when the wound had not yet healed; but, in the one just mentioned, the wound healed extremely well, and the patient has continued in good health up to the present time. It seems certain that iodine has a powerful action upon the blood. After this patient had inhaled the iodine through the respirator, in which were placed four grains of iodine, for ten minutes, anxiety, uneasiness and a violent burning sensation in the whole skin was felt. This continued for twelve hours. The inhalation was then reduced to two or three minutes per diem, when no such troublesome symptoms followed.

TURKEY.

Constantinople, March 25.

MEDICAL LIFE IN TURKEY GENERALLY.

In commencing my communications to the *Medical Times and Gazette* on the state of Medicine in Turkey, and especially Constantinople, I cannot conceal from myself the fact that to give a clear insight into Medical life, as it is in this Empire, is a task of extreme difficulty. The condition of the East is, in a Medical point of view, as well as in in every other respect, so totally different from what we are accustomed to in other parts of Europe, that I am afraid, my communications would be unintelligible to some of your readers, unless I first gave you a short historical *exposé* of it. The present state of Turkey shows, in fact, the most varied and curious mixture of old and new, in close proximity to, and yet quite independent of, each other, which renders the contrast that exists between them so much the more striking. The old finds its stronghold in the natural development and the original mode of thinking of the inhabitants, while the new has been forced upon them by the efforts and encroachments of the Western nations; but is unable, at least in our time, to overcome custom and prejudices that have existed for centuries, and are cherished by the people as a sacred inheritance. This is the key to the strange state of civilization in the East. We must therefore consider the old curative art of the natives apart from modern Medicine, which has been imported from Europe; as it is only thus that we can hope to understand the present state of Medical life in Turkey.

The Medical knowledge and art of the Eastern nations, and especially of the Turks, has not been developed in special Schools of Medicine, but has been handed from father to son in certain families which generally took upon themselves the cure of a certain class of diseases only. Thus, fractures and dislocations, diseases of the eye, scab on the head, inguinal hernia, wounds and external lesions always belonged to different sets of Doctors, and still do so at the present day. The only operation which the native oculists are able to perform, is depression of cataract; and I have seen some patients whose sight has really been restored by the manipulations of these empiricists, but a great many more who, in consequence of them, have entirely and for ever lost their vision.

THE KIRIKDJIS.

The most famous among the native Doctors are the Kirikdjis, who undertake to cure fractures of the extremities. These are generally Turks or Armenians, and the confidence they enjoy is so universal that a case of fracture scarcely ever comes under the care of a European Surgeon. Besides, the people are convinced that everywhere else, if a fracture has taken place, amputation of the fractured limb is resorted to, and that the Constantinopolitan Kirikdjis are the sole and exclusive possessors of the secret, which renders a cure of such accidents possible without amputation. The Levantines —that is, the subjects of European Powers who are born here, and who are much more susceptible to Eastern superstition and bad habits than the Turks are to European civilization—hold, for the most part, the same opinion. Some time ago your Correspondent had the opportunity of hearing a young gentleman of French origin do battle for the superiority of the Turkish and Armenian Kirikdjis to European Surgeons: he maintained that the former were able to cure a fracture within a week, while the latter wanted at least forty days for it. The fact is, this good man only repeated what the Kirikdjis continually assert of themselves, and what they also seem to prove to unscientific minds. If an accident happens to a limb, the first thing is to call in a Kirikdji, and to ask him whether a bone has been fractured; and he, as a matter of course, invariably gives an affirmative answer: he says either that it is a case of fracture, or one of longitudinal fissure. A neat bandage is then put on, which is removed a week afterwards; and if it happens that every trace of the

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accident has disappeared, the patient is declared to be cured of the fracture; otherwise the bandage is again put on. It consists in enveloping the limb with tight bands, and the putting on of wooden splints; and some Kirikdji are really skilled in these manipulations; but they never extend them beyond the bone pretended to be fractured, so that the neighbouring joints always remain free, and the pressure exercised by the bandage is so great that a swelling of the limb almost invariably occurs, and sometimes even gangrene is caused by them. For the same reason real fractures generally heal with deformity or shortening of the limb.

ERYSIPELAS; JAUNDICE; GHELENDJIK AND THE RED WATER.

There are other forms of disease which the population of this city firmly believe do not come within the scope of European Medicine; and among these I may mention erysipelas and jaundice. The Osmanlis try to cure the latter by ordering the sufferer to look fixedly and steadily into a vessel of yellow metal partly filled with water, on the bottom of which verses from the Koran are engraved. As a further proof of the superstition which prevails here, I may mention that a Physician is rarely consulted by a patient who has been ill for some time, without being told by him that he has already sought the advice of the Ghelendjikdji (female doctors), and has taken the red water. If questioned who he means by Ghelendjikdji, and of what the red water consists, he says that they treat and cure the Ghelendjik, and that the red water is a most marvellous medicine. It is difficult to describe what the Ghelendjik is. It is a disease which is not named in our systems of pathology, and which, as their doctors assert, and as the people believe, is unknown in Europe: therefore, if a patient has reason to think himself affected with Ghelendjik, he never entertains the idea of consulting a European Physician. It is only when the red water has proved unsuccessful, and when it is therefore evident that no Ghelendjik is present, that European advice is sought. If the cure by red water fails, these Medical women get out of the dilemma in which they find themselves by telling the credulous patient that the Ghelendjik is cured, but that there is a complication with another disease, the treatment of which is not in their province. The existence of Ghelendjik is presumed if the complexion is pale, the limbs weak, and œdematous swellings are observed. But these symptoms are by no means pathognomonic, for in every possible form of distemper these specialists recognise their special disease and sell the red water for it, which is more extensively used here than any other remedy. It is, in reality, quite an innocent preparation, and is said to have a diuretic effect. The exact composition of it is not known; but it is believed to consist of ambergris, rain-worms, and cochineal. You must not suppose that this panacea is only in high repute with a special class of the inhabitants; but Levantines, Greeks, Armenians, Turks, and Jews, although so greatly differing from each other in their religious creeds, unite in brotherly faith in the wonderful powers of this medicine. Indeed, the Christians of the East even surpass the Turks in blind superstition and belief in everything that is marvellous. As Islam has prescribed to the faithful the whole mode of thinking, and has laid down certain rules for the performance of every function of life, the superstition in the Turks seldom extends beyond the limits fixed by their religion; while the imagination of the Eastern Christians has no bounds whatever. Hundreds of cases are quoted in which the red water is said to have worked marvels. This relative or that friend had for months been treated by many Physicians, and only became worse under their care, when, by the advice of a friend, who had himself experienced the wonderful effects of this remedy, he tried the red water, and was perfectly restored by it. The conclusions drawn from this are that the red water possesses a marvellous power, and, on the other hand, that a disease exists which is unknown to the European Physicians and cannot be cured by them. That the symptoms formerly described have in certain cases been relieved by that preparation is easy to understand if we consider that most of the Doctors here have, up to a very recent time, always had recourse to a very weakening treatment, which certainly did in many cases more harm than good. The present Sultan, Abdul Medjid, is often quoted as one amongst the many who have experienced the extraordinary effects of the red water. He had become hydropic in consequence of scarlet fever, and the Physicians had despaired of his recovery. At last an Armenian woman, the since then famous Mariam, was called in. She ordered the red water, and the Prince got well. He ever afterwards cherished a kind feeling towards her, and Mariam's fortune was now made. Crowds of people came to consult her, and she has accumulated great riches and procured high places for her children. Her son, Vastan Pasha, is one of the few Christians who have been able to obtain the title of Pasha, and the red water has become a panacea among Ghelendjikdjis, just as quinine, which has cured the Sultan of Ague, among the Physicians here. Even now the house of the far-famed Mariam continues to be quite beleaguered by crowds of patients from early dawn till late at night.

EVIL SPIRITS AND AMULETS.

An important disease in Oriental pathology is the being possessed by evil spirits. Various diseases of the nervous system, especially convulsions and disorders of the mind, are ascribed to the presence of demons. To drive these out is the task either of special conjurors, who try to attain this end by various mysterious procedures and cabbalistic words, or of the priests, who endeavour to do the same by reading a few verses from the Koran or the Gospel. This shows that the mode of thinking in the Eastern people, whether they belong to the Christian or the Turkish persuasion, is essentially the same, and that in the different races there is only a difference in the external form. Turkish, Armenian, and Greek priests are by no means loth to further the popular superstition just mentioned, partly from ignorance and stupidity, partly from greediness. It is only just to say that the Roman Catholic clergy, which are on a higher level of mental culture and subjected to a stricter discipline, never stoop to such juggling practices. But the Roman Catholic part of the population is not the less superstitious, and I have often been informed that strict Catholics have asked Turkish priests and divines to render them services which their own clergy refused to perform. It is, indeed, a very curious fact, that in spite of fanaticism and religious intolerance, the Christian population has a special confidence in the marvellous powers of Turkish jugglers. We cannot, therefore, be surprised to find in a population possessed of such ideas implicit belief in other sympathetic cures. Amulets are worn around the neck as a protection against the evil eye (*eativo occhio*), and diseases of every description. The amulets worn by the Turks generally include a little bit of paper, on which a verse from the Koran is written; Christians, especially Roman Catholics, use lockets with portraits of saints; and the bedside of Greek patients is not unfrequently found to be surrounded by whole rows of pictures of saints.

SYPHILITIC DISEASES.

The treatment of syphilitic diseases here is in the hands of countless empiricists, especially Jews, Greeks, Armenians, and Turks. Amongst the means employed to cure such patients, mercury stands first. It is either given internally as sublimate, and generally in extremely large doses, but oftener cinnabar in form of fumigations is administered; and, although by the abuse of these heroic remedies great mischief is often done, still I am obliged to say that I have seen a few very obstinate cases of this disorder which confirmed Mr. Langston Parker's views, as they had entirely resisted the usual methods of mercurial treatment, and were rapidly cured by fumigations with cinnabar. The head of the patient is, of course, not exposed to the fumigation. Some time ago a European Physician, who is well known here, tried the method mentioned, but neglected to attend to this precaution. The fumigation thereby became an inhalation of mercury, and the patient died a few moments after it had begun. This case created great excitement for a few days, but dead men do not complain!

MIDWIFERY AND DISEASES OF WOMEN.

Native midwifery is almost entirely in the hands of uneducated females of every nation, who resort to the most insane manipulations on the parturient women, not only in difficult, but also in natural labour. But aid in parturition is not their exclusive occupation; they are also consulted in diseases of women and children, prescribe remedies for sterility and thereby cause many diseases of the womb; but their chief province is to cause abortion. The Turks consider neither the causation of abortion nor the prevention of conception to be wrong. If a Turkish lady does not desire to see her progeny

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increase in numbers, or if she is afraid that by another pregnancy the wet-nursing, which is often continued until the third year after parturition, might be interrupted, she subjects herself with the greatest indifference to the manipulations of a midwife, in order to bring on miscarriage, sometimes with, and sometimes without, the knowledge of the husband. Dangerous hæmorrhage, inflammation, and mortal wounds of the uterus are frequently the consequence of such proceedings. Such cases are met with in the poorest cottages as well as in the palaces of the highest Turkish dignitaries, and the Government never in any way interfere with them. The Medical Society of this city, more than two years ago, brought the disgraceful practices of a fellow, who called himself Doctor and who was far-famed as a wholesale causer of abortion, under the notice of the Grand Vizier, and made propositions at the proper quarter for remedying the crying evil, but both endeavours have signally failed. This crime, which is a deep-rooted custom in Turkish families, is, no doubt, one of the reasons for the rapid decrease of the Turkish population, while the number of the Christian inhabitants is continually augmenting.

THESSALIAN HERBALISTS.

The inhabitants of a Greek village in Thessaly, of the name of Zagora, enjoy a great authority as Doctors in the European provinces of Turkey. Their art has been inherited for many generations; all of them are, in fact, Doctors by birth, as in a village devoted to agriculture every one is a farmer. They are famous for their knowledge of the remedial powers of plants, and hawk their medicines (herbs and ointments) from one place to another, exciting by their cry Καλὸς ἰατρὸς (good doctor) the sufferers to purchase their remedies.

In my next letter I shall give you some information concerning the state of European Medicine in Turkey.

GENERAL CORRESPONDENCE.

CONSULTATIONS WITH HOMŒOPATHS.

LETTER FROM MR. ROBERTON.

[To the Editor of the Medical Times and Gazette.]

SIR,—The readers of your Journal last week must have seen with astonishment certain resolutions and letters forwarded to you for publication by a Committee of the Medico-Ethical Association of Manchester, the object being to inflict on me an offensive notoriety for having met in consultation a Homœopathic Surgeon.

As the Committee do not attribute this act of mine to any selfish motive, the course they have taken is, most assuredly, a singular one; nor should I at all have apprehended its meaning had not one of them told me that for a Medical man, under any circumstances, to consult with a Homœopath is, in a Professional sense, "the unpardonable sin." The impulsive manner in which these gentlemen have acted reminds one of an amusing anecdote in Addison's "Freeholder." During the Rebellion of 1715, just before the battle of Preston, the author tells us, a body of Cavalier forces, adherents of the Pretender, was seen marching for the North, when some kind of game chanced to cross the road, and instantly the commander and most of the officers, clapping spurs to their horses, with whoops and halloos, galloped after it, quite heedless of consequences. Just so was it with the Committee. The secretaries, having heard of my consulting with a Homœopath, a meeting was at once summoned, and though I endeavoured to calm the excitement by stating to the members the reasons that had induced me to act as I did (which need not here be repeated), but especially this, that the patient's husband being my near relative, the consultations in question were unavoidable, unless I had put aside every consideration of kindness and humanity which, of course, I did not feel inclined to do. All I could say, however, availed nothing; it was not listened to; the game had started, and the Committee were eager for the pursuit. Your readers know the issue.

The cavaliers, we may suppose, returned from their equestrian hunt animated and refreshed, for to them it was a customary, pleasant diversion. But it has, probably, been otherwise with our Medico-Ethical Committee, who must feel, I imagine, some misgivings lest this their novel, ungenerous sport should call forth the disapprobation of their brethren. I deeply regret that so strange an exhibition of unkind feeling has happened in our neighbourhood. For myself I can say that during a very long Professional life few, if any, have had less discord with those in the same walk than I; and, indeed, it is well known that nowhere in the kingdom does concord and good feeling more uniformly prevail among the members of our Profession than in Manchester, and so I trust it will ever continue. If these proceedings of the Committee appear, in some degree, to furnish an exception, it is, I feel persuaded, a cloud that will soon pass. But should good humour be not speedily restored amongst us, as I anticipate, it will not be the fault of

Your obedient, humble servant,

JOHN ROBERTON.

Manchester, April 15.

[To the Editor of the Medical Times and Gazette.]

SIR,—The occurrences which have recently taken place at a meeting of the Manchester Medico-Ethical Society, in reference to the fact of a gentleman of Mr. Roberton's professional *status* having met a Homœopathic Practitioner in consultation, may well serve as a text for some special consideration of the proper line of conduct under the embarrassing circumstances therein involved. It is to be hoped that there are few men of right feeling, whatever steps on the Professional ladder they may have attained, who would voluntarily and knowingly proceed to a formal consultation with one of a class of Practitioners whose tenets they conscientiously believe to be a tissue of absurdity, if not (on the part of many) of wilful imposture. But it may happen to any of us, to one the most honourable, and to whom quackery in any form is utterly abhorrent, to find himself, by fortuitous circumstances, as in Mr. Roberton's case, brought face to face with one of his class of Medical Practitioners. He is summoned for instance, as Mr. Roberton was, with the knowledge indeed that the patient had been under homœopathic treatment, but with the full assurance that he was to meet a regular Practitioner (in this case the relative of the family). To his chagrin he finds on his arrival, that the relative he had promised to meet was not there,—the homœopath was. Or again, it may happen that some more or less distinguished consultant receives an urgent and distant summons to visit a patient, without knowing what, or indeed if any, Practitioner is in attendance. On his arrival, he too finds that the person he has been invited to confer with is a homœopath. What in either of these cases should be the line to be adopted by the regular Practitioner is a question the proper solution of which is rendered necessary, more than ever by the recent occurrence in Manchester.

In my own mind, the course to be pursued by every man who has the honour of his Profession, and the dignity of true Medical Science at heart, is simple and straightforward. "Touch not the unclean thing." In no case or combination of circumstances, excepting such as those in which delay might be followed by death or fatal danger, let the regular Practitioner suffer himself to be entrapped into a formal consultation with an homœopath. If by unforeseen circumstances a consultant is brought into contact with such an individual, let it be made clear both to him and to the friends of the patients that the homœopath cannot be recognised at all in his Medical capacity, still less can he be consulted and conferred with. At the same time, the regular Practitioner should without hesitation offer his own services, but on the distinct understanding that they are to be single, or in co-operation only with some other Practitioner of similar creed. This course can be pursued without the necessity of any demeanour inconsistent with the bearing of a gentleman or of a considerate friend, and it may be done without exciting the indignation of patient or friends, though it must of necessity occasion some painful embarrassment. In the majority of cases if the disease be one of severity or obscurity, the parties concerned will see the policy of dispensing with the infinitesimal services of their homœopathic friend, but should they on the contrary, insist on a consultation, then the only course open is for the regular Practitioner to take his leave without seeing the patient. This may require some moral courage, I admit, and in this only, as it appears to me, has Mr. Roberton been deficient. The distress and entreaties of an old friend and patient were too

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much for a kind heart; he allowed his feeling to get the better of his judgment in the first instance, and (as "facilis descensus Averni") the first lapse was followed by others.

I have ventured, Sir, to express my own own convictions on this important moral question, for no other reason than to elicit the opinions of others, who like myself would keep the honour of our Profession untarnished by the many charlantanries of this credulous age, and in the hope that your editorial powers may be exercised in the endeavour to point out some general rules of conduct under such circumstances as have brought Mr. Roberton under the ban of the Manchester Medico-Ethical Society. I am, &c.

A Provincial Physician.

FEVER AT LIVERPOOL.

Letter from Dr. Irvine.

[To the Editor of the Medical Times and Gazette.]

Sir,—In accordance with your desire for further details respecting the Egyptian frigate *Scheah Gebald*, and its connection with the outburst of exanthematic typhus in Liverpool, I beg to forward you all the particulars of which I am in possession.

On March 1, after the frigate had been in dock a week, under the charge of an Arabian Surgeon, and 32 men had been removed to the Southern Hospital, I was called upon to visit the crew on board, and found 64 men sick. Of that number, 49 were labouring under constipation of from 5 to 10 days' duration, and merely required active purgatives; 6 were suffering from dysentery, and recovered under appropriate treatment; 5 were suffering from diarrhœa, which speedily gave way to the prescribed remedies; 2 were labouring under quotidian ague, and, although considerably improved, had not completely recovered when they left for Alexandria; 2 presented for examination had slightly frost-bitten feet, but were otherwise healthy.

During my subsequent attendance, I prescribed for twenty-three additional cases, which all did well. Of these, sixteen were cases of constipation, five of dysentery, and two of acute bronchitis. Information which I obtained from the Arabian Surgeon, who was able to speak French, to the effect that no typhus fever occurred during the voyage from Alexandria, would tend to support the opinion that these Egyptian seamen arrived here in possession of typhus poison, *minus* some condition necessary for the origin of the disease and departed with that condition on board; yet it appears strange that none of the Englishmen who were engaged at work on board the frigate were attacked with fever, except the Chemist's assistant, who distributed the medicines to the men, and the pilot, who brought the ship into port.

I am, &c.

John W. Irvine, L.R.C.S. Edin.

15, St. Paul's-square, Liverpool, April 17.

ROYAL MEDICAL BENEVOLENT COLLEGE.

Letter from Mr. Cattlin.

[To the Editor of the Medical Times and Gazette.]

Sir,—Your leading article of the 6th instant, respecting the sanitary condition of the Royal Medical Benevolent College, has attracted the attention of the "Exhibitioners' Committee." I am requested to thank you for making the defective ventilation of various parts of the building publicly known, and, at the same time, to address a few observations upon the state of affairs at the College. In one paragraph you remark:—"It will scarcely be believed that the Council of the Royal Medical Benevolent College positively refused to receive or look at this report (of Dr. Aldis) because it seems to reflect on their management." In another, "The Council need but ask, to have plenty of subscriptions for a new school-room." On the first paragraph, allow me to observe, that it is to be regretted that caprice or corporate pride should prevent the Council from accepting suggestions from *any* source which are likely to benefit the Institution. Recent proceedings of the governing body had appeared to indicate the dawn of a more liberal policy, and various improvements have been made during the past three years. For example:—To the earnest and energetic exertions of the Visiting Committee the Institution is indebted for the entire reconstruction of the external drainage, at the expense of the contractor; new builders have been employed; the legal and architectural business of the College has been placed in different hands; the comforts and education of the boys are watched over by separate sub-committees, which report regularly to the Council; a balance-sheet is now published annually; the "Endowment Fund" of £2000 belonging to the Surrey Scholars has been restored; and there are at the present time nearly £3000 in the Building Fund. It is due to the Council to acknowledge that several of the above changes have been adopted at the suggestion of the "Exhibitioners' Committee,"—a body of Governors who had publicly expressed dissatisfaction at their former management. We fully concur in the expression conveyed in the second paragraph which has been quoted from your leading article. If the Council be faithful to its trusts and courteous to its constituents, the public will readily supply any support which shall be needed to complete the College. If it be necessary to enlarge the Schools, to obtain an amended Act, or to make other alterations for the purpose of carrying out the original objects of the College, "the Council need but ask to have plenty of subscriptions." At present the arrangements are imperfect, and the charge of £40 a-year for "Exhibitioners" excludes the sons of "lesser lights" from that department of the school. Notwithstanding the touching appeals which the College has issued in behalf of this class of the Profession, no aid whatever has yet been extended to it. The claims of the orphan, of the aged, and of the widow have each been recognised, but those of our poorer brother, who "groans and sweats under a weary life," still lie neglected. I am, &c.

William A. N. Cattlin.

1, Highbury-place, Islington,
April, 1861.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Friday, April 12, 1861.

Dr. Babington, President, in the Chair.

A Paper, by Dr. Humphry, was read, entitled

Observations on the Growth of the Long Bones and of Stumps.

The first part of this paper gave the results of some experiments with madder upon the bones of pigs with reference to the mode of growth of the bones in length. They were confirmatory of the observations by Hales, Duhamel, Hunter, and others, that the elongation is effected by addition at the ends of the shafts, the addition being effected by growth and ossification of the epiphysial strata of cartilage on the side next to the shaft. The experiments further showed that the growth at the two ends of the shaft is unequal; that it is usually most rapid at the larger end of the bone; and that it is always most rapid at the end where the epiphysial cartilage remains latest—that is to say, the growth proceeds most rapidly at the end where it is longest continued. The proper relation of the soft parts to the bone during the periods of growth is maintained by the interstitial growth of the periosteum, and by the continual sliding or shifting of that membrane upon the bone towards the end at which the growth is most rapid. This is attended with a certain traction upon the medullary and other vessels, and determines the direction of the canal for the medullary artery, which is always slanted towards that epiphysis which is last ossified to the shaft; in other words, towards that epiphysial line in which growth proceeds most quickly. The amount of growth in the respective epiphysial lines is very determined, and corresponds exactly on the two sides of the body, though that on the one side is not affected by the other; and it appears to regulate the amount of growth of the soft parts; for, if it be either arrested or accelerated, the growth of the soft parts is affected in a similar manner. In the second part of the paper the Author showed

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the common impression, that a stump keeps pace with the rest of the body in its growth, to be erroneous. He did this by measurements taken from persons who had undergone amputation in childhood, and by experiments upon animals. The rate of growth varies. The stump rarely maintains its relation to the corresponding segment of the other limb; and it fails to do so, as might be expected, most markedly in those parts in which the growth of the bone takes place chiefly at the lower end. Thus, if amputation in the thigh be performed on a young child, one-third from the lower end, the stump, when full growth has been attained, will not be more than a third as long as the other thigh; its relative length will have thus been altered from two-thirds to one-third—that is, it will not have grown more than half as fast as the other thigh. The information derived from the measurements of stumps was thus shown to be quite corroborative of the observations made, in the first part of the paper, respecting the growth of the bones at their epiphysial lines. The instances in which the bone of a stump elongates so as to be troublesome and require a portion to be removed, are regarded by the author as quite exceptional, the phenomenon being probably due to some irritation, and being, therefore, of the same nature as the spicules and exostoses which are occasionally found upon stumps and on other parts of the skeleton.

A Paper, by Dr. SANSOM, was read, on

THE ACTION OF CHLOROFORM.

The Author stated the various hypotheses as to the mode in which the anæsthetic exerts its influence. The majority of writers attributed to it a special elective affinity for the nervous system, with which it is brought in contact by the circulation—a direct power of paralysing, in greater or less degree, the various functions of the brain. The later researches of Faure and Gosselin—who have applied chloroform to the brain, both directly and by the medium of the circulation, without producing unconsciousness—shook these hypotheses to their foundation. The late Dr. Snow was greatly impressed with the notion that anæsthesia stood in a direct relation with imperfect oxygenation of the blood, and facts seem to point more and more strongly to this conclusion. The analogy between narcotism and apnœa is one that has not failed to present itself to the minds even of those who looked on chloroform as a special nerve-poison; and the production of anæsthesia by the causes of apnœa is of the most constant occurrence. As to the mode in which this deficiency of oxygenation is brought about, no satisfactory explanation has as yet been given; and authors have been fain to avail themselves of the unsatisfactory word "catalysis." If the suspension of hæmatosis by the vapour of chloroform be a direct action, it must be effected either by an impediment produced to the endosmosis of oxygen through the respiratory apparatus, or by a special action upon the blood itself. Faure's theory is, that chloroform-narcotism is induced by a caustic action upon the lungs—that chloroform never produces its effect by absorption; but this is rebutted by experiments, which have shown that hypodermic injection of chloroform will produce anæsthesia. The Author then adduced certain observations as to the action of chloroform upon the blood: how it modifies coagulation, and how its presence in very small quantites is sufficient to stamp a characteristic appearance upon the clot. He brought forward a number of experiments which he had performed upon non-circulating and upon circulating blood, and hoped that they would contribute towards the more perfect knowledge as to the action of the anæsthetic. His conclusion was that chloroform exerts a caustic action upon the proteinous cell-wall of the blood-corpuscle; this action being manifested in the following progressive manner:—1. Corrugation of cell-wall; alteration of shape. 2. Coherence of corpuscles. 3. Coalescence of cell-contents; an actual solution of the corpuscles. Instant stasis of circulating blood is effected if fluid chloroform permeate the lining walls of the vessels. The circulation in the web of a frog's foot, as seen by the aid of a microscope, is thus modified by anæsthetizing the frog by the vapour of chloroform. 1. Increase of velocity of circulation. 2. Dilatation of arteries and capillaries. 3. Decrease of velocity of circulation. 4. Alteration of cell-walls of corpuscles; coherence. 5. Interruption by cohering masses to capillary circulation. 6. Stasis of the blood. The enlarged capacity of the arterial system and the decrease of the velociy of the circulation accounted for the anæmia of the brain observed during narcotism.—(*American Journal of Medical Science*, Oct. 1860, p. 400.) The author summed up his conclusions as follows:—1st. That chloroform-narcotism is due to the imperfect stimulus to the vital functions of a mal-oxygenated blood. 2nd. That this mal-oxygenation is due to the direct influence of the vapour of chloroform upon the blood, and especially upon the blood corpuscles. 3rd. That the vapour acts caustically on the cell-walls of the blood-corpuscles, and thus impedes the endosmosis of oxygen. 4th. That if the blood be so deteriorated as to supply an insufficient stimulus to the heart, death is by syncope; whilst if stasis be primarily effected in the lungs, death is by apnœa.

Dr. KIDD wished to ask the Author if he had read the experiments of M. Lallemand, who, he believed, had shown that the blood is not changed during the administration of chloroform unless the respiration is interfered with. He (Dr. Kidd) was astonished that the author should have thrown doubt as to the chief action of the chloroform being on the sensory ganglia. If equal bulks of the sensory ganglia and any other tissues of the body were taken it would be found that from the former four times as much chloroform could be obtained. This, coupled with the fact that the blood is not changed, he believed was conclusive as to the local action of chloroform on those parts of the nervous system he mentioned. Chloroform was a caustic, and if dropped on blood it would of course destroy it. He remarked that ether had a marked action on the blood, mixing with it and darkening it. It could not be separated from the blood, or from the sensory ganglia, whereas chloroform could be from either. A committee had recently been appointed in America for the purpose of investigating the relative merits of chloroform and ether, and also of mixtures of ether and chloroform. They were anxious to receive facts bearing on any of these points.

Dr. LEE then adverted to the use of chloroform in the practice of midwifery. In 1853 he had brought forward cases showing the pernicious effects of chloroform in labour. He believed that chloroform suspended uterine action, and hence often rendered the use of forceps necessary. It was said to destroy sensibility, and yet not to interfere with uterine action. His experience was at variance with such a conclusion. He then read from the *Transactions of the Obstetrical Society*, vol. i. p. 82, a case in which chloroform had been used in order to facilitate turning, but in which it was found impracticable to perform that operation; craniotomy was therefore had recourse to. Dr. Lee considered that in this case it would have been preferable to have performed craniotomy at once, and that in his opinion it was not a case for turning.

The PRESIDENT here interrupted Dr. Lee, remarking that the paper under discussion related to the physiological action of chloroform, and not to its use in any particular department of practice. He considered that his (Dr. Lee's) remarks were somewhat foreign to the subject now before the Society. He suggested that Dr. Lee should amplify and embody his remarks in a paper to be read at some future meeting.

Dr. LEE said that he had written such a paper, but that it had been black-balled. But although thus prevented from expressing his opinion on such an important question, he would, as a member of this Society, take part in any discussion which might arise on the subject. He admitted, however, that he was not quite in order in entering into the question of the use of chloroform in labour.

The AUTHOR said that although he fully appreciated the value of the experiments which Messrs. Lallemand, Perrin, and Duroy had made, he, at the same time, dissented from certain of their conclusions. In no part of their work had they recorded any direct microscopical observations of the action of chloroform upon the circulating and non-circulating blood. Their strongly-expressed opinion that chloroform acts primarily on the nerve centres was based on these observations—first, that they lost their functions of responding to mechanical stimuli in a progressive manner; second, that more chloroform was discoverable in the nerve centres after death than in other parts of the body. The first proposition only concludes that the nerve centres lose their force progressively—whether by the circulation of an active poison, or by the influence of an altered blood—it does nothing towards determining. The second, too, affords very slender evidence. The brain, with its fine and numerous vessels, and yielding tissue, would appear, *a priori*, to afford the readiest means for the exosmosis of chloroform. In the liver, in which similar

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facilities to a less degree occur, chloroform was discovered in large quantities. In none of the analyses of MM. Lallemand, Perrin, and Duroy was the proportion of chloroform found in the brain to that found in the liver so great as four to one, as was asserted by Dr. Kidd.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—At the Comitia Majora, held on Monday, April 15, the following gentlemen, having undergone the necessary Examination, and satisfied the College of their proficiency in the Science and Practice of Medicine and Midwifery, were duly admitted to practise Physic as Licentiates of the College:—

Booth, John Gregory, Padiham
Brooks, Bransby, Henley-on-Thames
Davey, Alexander George, St. Bartholomew's Hospital
Ellam, John, Sneinton, near Nottingham
Ewens, John, Milton Abbas, near Blandford
Foulds, Samuel, Staveley, near Chesterfield
Granville, Joseph Mortimer, Bristol
Jones, Philip W., Wakefield
Mead, George Borwick, Newmarket
Middleton, John William, Westminster Hospital
Pilkington, William Henry, Enfield, Accrington
Rayner, Thomas, M.D., Manchester
Savage, Thomas, Birmingham
Scott, Henry Thomas, 7, Bedford-place, Old Kent-road
Thompson, Charles, Leicester
Turton, Frederick, Wolverhampton
Woodward, William, Worcester.

ROYAL COLLEGE OF SURGEONS (a).—The following gentlemen having undergone the necessary Examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 10th inst.:—

Angier, George Augustus, Ipswich
Dollman, John, Birmingham
Ellis, Heber Dowling, Gloucester
Fenn, Edward, Ardleigh, Essex
Hartill, W. H., Willenhall, Staffordsh.
Howell, H. S., Ladbroke-square, Notting-hill
Langton, John, Denmark-hill
Lemon, H. M., Welshpool, Montgomeryshire
Macaulay, Francis Edwin, Sheffield
*Maurice, J. B., Marlborough, Wilts
Oliver, Richard, Shrewsbury
Parker, D., Clopton Hall, Suffolk
Pennington, A., Warrington, Lancashire
Shrimshire, Truscott J., Holt, Norfolk
*Stone, W. D., Lincoln's-inn-fields
Thorpe, Sidney, Huntingdon
Venning, E., Moorwinstow, Cornwall
Walker, Bernard, Sheffield
Watson, Forbes, Nottingham
Wollaston, Thos. G., Shrewsbury.

At the same meeting of the Court, Mr. Wm. Christopher Fairbairn, of Greenwich Hospital, passed his examination for Naval Surgeon. This gentleman had previously been admitted a Member of the Edinburgh College of Surgeons.

The following gentlemen, also, having undergone the necessary Examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 16th inst:—

Armstrong, Samuel, Woodbridge, Suffolk
Baker, William Mornant, Andover
Bendall, James, Trowbridge, Wiltshire
Brotherton, W. H., Tottenham, University College Hospital
Byles, Alexander, London
Clarke, Arthur, Cold Norton-hall, Maldon, Essex, St. Thomas's Hospital
Evans, Thomas Melancthon, St. Neots, Huntingdonshire
Garnham, D. J., Lowestoft, St. Thomas's Hospital
Grabham, Michael Comport, L.S.A., Rochford, Essex
Harrington, James Douglas, B.A. Oxon, South Newington, Oxford
Kilburn, John Edward, West Auckland, Durham
Lonchester, Henry T., Norwich, Student of St. Bartholomew's Hosp.
Lloyd, Edward Sidney, Broxbourne, Herts
Moore, Daniel, L.S.A., Hastings
Richards, C. C., Caerphilly, South Wales, King's College.
Robinson, Hayne Sparrow, Cambridge
Scott, N. G., Wappenham, Northampton, Student of St. Barthol. Hosp.
Smith, Henry, Brighton, St. Mary's Hospital
Smith, Edward, Bedford, St. George's Hospital
Tibbits, R. T., Bayswater, University College Hospital
William, John, M.D. St. Andrews, Pwlheli, Carnarvonshire.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise on Thursday, April 11:—

Grabham, Michael Comport, Rochford, Essex
Holmested, Thomas, Bocking, Essex
Moore, Daniel, Hastings
Savage, Thomas, Wolverhampton
Spurgin, Frederick William, Stratford St. Mary, Suffolk.

(a) This College is the only one which does not send lists of New Members to the Medical Journals.—Hence frequent mistakes, for which the Journals are not responsible.

(b) Those gentlemen with an asterisk prefixed to their names have also the passed Preliminary Examination for the Fellowship of the College.

APPOINTMENTS.

BLOXAM.—Mr. Thomas Bloxam, Fellow of the Chemical Society of London, and for the last five years Chemist to the Industrial Museum of Scotland, has been appointed Lecturer on Chemistry at the School of Medicine, Grosvenor-place.

COATES.—Dr. Coates has been elected Physician to the Bath United Hospital.

MURRAY.—J. Jardine Murray, F.R.C.S. Edin., has been appointed Assistant-Surgeon to the Brighton Eye Infirmary.

TAAFFE.—R. P. B. Taaffe, F.R.C.S. Eng. (Exam.), has been appointed Surgeon to the Brighton Eye Infirmary.

DEATHS.

BALDRICK.—April 6, James Baldrick, of Measmount, Ramelton, County Donegal, M.D. Glasg.; C. M. and L.M. Glasg.

BELL.—April 16, Robert Bell, of the Nethergate, Dundee, M.D. Edin., L.R.C.S. Edin., formerly of the Army Medical Department.

DENNIS.—April 7, Philip Dennis, of Alnwick, Northumberland, M.R.C.S. Eng. aged 73.

DEWAR.—April 15, suddenly, Henry Andrew Dewar, of Union-street, Aberdeen, M.D. Dartmouth College, New Hampshire; Licentiate in Dental Surgery R.C.S. Eng.

HARBISON.—April 4, William Harbison, of Rathfriland, Downshire, L.F.P.S. Glasg., L.M.

TAIT.—April 12, at 14, St. Paul's-road, Highbury, N., of diphtheria, Greville, E. Tait, Esq., late Staff-Assistant Surgeon, Army.

THE BRUSSELS MEDICAL CLUB.—According to the *Presse Médicale Belge* this institution, founded a year ago, has met with considerable success, and is about to be imitated at Berlin and elsewhere. It possesses a reading-room, library, and a saloon in which a *conversazione* of its members and their friends is held every night. At present it consists of 153 subscribers only, but there seems every probability of much further extension. The expenses for the year only amounted to 4337 francs. Everyone is eligible who has a diploma in any branch of Medical or Natural Science, provided he has exercised his Profession with "honour, dignity, and delicacy." He must be recommended by three members, and is elected by ballot, three-fourths of the votes present being necessary. The Club is governed by a committee, annually elected, consisting of six Physicians, three Pharmaciens, and one Veterinary Surgeon—these choosing the President and other officers for the time being.

THE QUEEN'S COLLEGE, BIRMINGHAM.—(From a Correspondent).—After so many attempts to rescue the Queen's College from its past liabilities, we find that there is now a certain prospect of relief from the embarrassment under which the institution has been labouring. Immediately after the meeting of creditors, Mr. Sands Cox placed in the hands of his solicitor the necessary funds for payment of the first instalments to the creditors and of all claims under £5 in full, and the various amounts have been received by the creditors. At a recent meeting of the Council, on the motion of the Right. Hon. the Principal, the Earl of Lichfield, the thanks of the Council were presented to Mr. Cox, and a similar vote was also recorded by the creditors for the generous manner in which Mr. Cox has undertaken the payment in full of the trade debts of the College. It is hoped that the patrons and friends of the College and the promoters of education generally, will not allow Mr. Sands Cox to incur any considerable loss by his disinterested interference in the matter. Of the value of the College to the town and midland districts, the following facts speak for themselves. Full six hundred Medical Practitioners in the midland districts, and upwards of one hundred in this town, including all the Surgeons of the General Hospital, with one exception, in which the training only was temporary, have been trained at the College; and in further testimony of the character of the training, it may be mentioned that the Professor of Anatomy, and the Professor of Chemistry, in King's College, London; the Professor of Surgery at the University of Wisconsin, United States; the founder of the British Hospital at Canton; and the only Surgeon who obtained the Victoria Cross in the Crimean war; and another Surgeon who received a medal and Cross, and the Order of St. Maurice, from the King of Sardinia, for professional services rendered to his troops, are numbered among Queen's College students. Then, again, upwards of seventy theological students already appear on the College books, and no less than fourteen clergymen trained in this department are at the present time engaged in pastoral labour in Birmingham and its environs, and thirteen students

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have been ordained by various Bishops during the past session—a larger number than in any previous year. We understand a subscription list has been opened, and that Mr. Cox has been already promised a fair amount of support. His friends will no doubt rally round him, and with their assistance he will we, trust, work out the philanthropic object he has in view—one which all parties must admit is creditable alike to that gentleman and the town in which the College chartered to wear a royal name has happened to be founded.

VITAL STATISTICS OF LONDON.

Week ending Saturday, April 13, 1861.

BIRTHS.

Births of Boys, 1012; Girls, 992; Total, 2004.
Average of 10 corresponding weeks, 1851–60, 1723·4.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	603	606	1209
Average of the ten years 1851–60	607·5	563·3	1170·8
Average corrected to increased population..	..	..	1238
Deaths of people above 90	..	..	..
Deaths in 15 General Hospitals	43	31	74

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1851.	Small pox.	Measles.	Scarlatina.	Diphtheria.	Whooping-Cough.	Typhus.	Diarrhœa.
West	376,437	..	2	4	..	8	4	3
North ..	490,396	..	9	7	4	17	2	4
Central ..	393,256	..	2	2	1	12	6	..
East	485,512	2	1	1	1	27	5	5
South ..	616,635	1	1	7	8	30	9	5
Total.. ..	2,362,236	3	16	20	9	94	26	17

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	30·259 in.
Mean temperature	44·2
Highest point of thermometer	63·5
Lowest point of thermometer	28·6
Mean dew-point temperature	41·8
General direction of wind	N.E.
Whole amount of rain in the week	0·00 in.

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NOTES, QUERIES, AND REPLIES.

Be that questioneth much shall learn much.—*Bacon.*

The Report of the Obstetrical Society is in type, but is unavoidably delayed.

Mr. Crompton's paper shall appear as soon as possible.

Dr. Wybrants may see by our two last numbers that his pamphlet has been noticed and answered.

Dr. Anderson's proof was not returned in time for correction this week.

The letter of our Liverpool Correspondent is unavoidably delayed until next week.

We have received and forwarded a donation of five pounds from an anonymous Correspondent, for the family of the late Dr. Wall, of Dunmanway. We need not add that we shall be happy to receive any further contributions.

M. C. S.—It is stated the real numbers at the recent special meeting were thirty-six for, and twenty-five against any amalgamation. As eighty-two Fellows attended, there was, therefore, not an actual majority in favour of Mr. Hawkins's motion, twenty-one having declined to vote while two Fellows, who spoke strongly against the proposition, did not hold up their hands either way. Had a division been granted, which was demanded, perhaps the result would have been otherwise than the one declared.

SANITARY REPORTS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Can any of your readers inform me where I shall find any good local reports on the sanitary conditions of towns in which the rate of mortality is shown? I have the reports of the original Sanitary Commission. How are the reports of the health officers in London to be obtained?

I am, &c. J. N.

COMMUNICATIONS have been received from:—

Professor Simpson; M. Claude Bernard; Dr. W. Farr; Mr. Le Gros Clark; Professor Laycock; Dr. Risdon Bennett; Dr. West; Dr. Jenner; Dr. Wilde, Dublin; Mr. Soelberg Wells; Dr. Anderson, Glasgow; Registrar-General, Scotland; Mr. Price; Dr. Graily Hewitt; Dr. Tanner; Mr. Hulme; Dr. Craig; Dr. Meadows; Registrar-General; Dr. Devenish; Mr. Rivers; Dr. Wybrants; Dr. Skipton; Mr. Thorburn; Mr. Vincent; Mr. Best, Rangoon; Dr. Bainbridge; Mr. Mann; Dr. Irvine; Mr. Taaffe; Mr. Bloxam; Mr. Crompton, Birmingham; Mr. Casalis; and our Correspondents at Liverpool, Dublin, Constantinople, Berne, Zurich, Paris, Vienna, and Berlin.

APPOINTMENTS FOR THE WEEK.

April 20. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

Royal Institution, 3 p.m. Max Müller, Esq., "On the Science of Language."

22. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

Royal College of Physicians, 8½ p.m. Dr. Beale's "Lecture on the Structure of the Tissues of the Human Body."

Medical Society of London, 8½ p.m. Dr. H. Symes Thompson "On Progressive Muscular Atrophy."

23. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

Royal Institution, 3 p.m. Professor Owen "On Fishes."

Royal Medical and Chirurgical Society, 8½ p.m. Mr. John Birkett "On Removing Primary Growths of Cancer in the Breast." Mr. T. Ballard "On a Previously Unobserved Preventible Cause of Idiocy, etc."

24. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopedic Hospital, 2 p.m.; Middlesex, 1 p.m.

Hunterian Society, 8 p.m. Dr. Peacock "On the Treatment of Delirium Tremens by Large Doses of the Tincture of Digitalis."

25. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m., London, 1½ p.m.; Great Northern, 2 p.m.

Royal Institution, 3 p.m. Professor Tyndall "On Electricity."

26. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

Royal Institution, 3 p.m. Professor Owen "On the Scope and Appliances of a National Museum of Natural History."

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PULVIS JACOBI *VER.*, NEWBERY'S.

To the Medical Profeſſion of Great Britain and Ireland.

GENTLEMEN,—We beg to call your attention to the following extracts from a Paper by the late John Cheyne, M.D., F.R.S.E., M.R.I.A., Phyſician to the Hardwicke Fever Hoſpital, Dublin, and Phyſician-General to His late Majeſty's Forces in Ireland, &c. &c., contained in the "*Dublin Hoſpital Reports*," *vol.* 1, *p.* 317.

"Since this caſe came into my poſſeſſion, I have been led to "make a good many clinical experiments, which have enabled me "to verify the reports which I had heard of the efficacy of JAMES'S "POWDER, in ſometimes removing the APOPLECTIC DIATHESIS in "perſons advanced in life. It is, moreover, worthy of obſervation, "that JAMES'S POWDER has been of remarkable utility in "certain inſtances of DETERMINATION OF BLOOD TO THE HEAD, which "occurred at an early period of life, and threatened to end by "effuſion. Laſtly, in two caſes of GENERAL PLETHORA, in which, "however, the head was more affected than any other part, "JAMES'S POWDER was exhibited by me with perfect ſucceſs."

Alſo *vol.* 1, *p.* 320.

"The following very ſimple method of exhibiting JAMES'S "POWDER, in caſes of undue determination of blood to the "head, is that which I have generally purſued. The patient is "made to begin with a very moderate doſe, not more than two "grains at bedtime, and to increaſe the doſe by half-a-grain every "night, until ſome ſenſible effect is produced upon the ſtomach, "bowels, or ſkin. Should the ſtomach be affected with ſickneſs, "the doſe muſt be leſſened by one grain on the following night. "By the addition of a little rhubarb to it, a larger quantity of "JAMES'S POWDER may be adminiſtered than the ſtomach could "otherwiſe bear. If the ſkin is ſoftened, or the bowels affected, "the doſe ſhould not further be increaſed, but it muſt be repeated "every night for a conſiderable length of time: in ſeveral inſtances "I have known eighteen or twenty grains taken for a conſiderable "period without any inconvenience."

The following extract (ſhowing the increaſing eſtimation in which the true Dr. James's Powder is held by Medical Practitioners) is taken from "The Lumlæan Lectures," 1858-59, delivered before the Royal College of Phyſicians, by A. Tweedie, M.D., Phyſician to the London Fever Hoſpital, who is admittedly one of the higheſt practical authorities on the ſubject of Fever. He ſays, ("*The Lancet*," *June* 16, 1860, p. 590,) as follows:—

"If the febrile excitement be ſuch as to require antimonial prepa- "rations, a pill containing 2 or 3 grains of James's Powder (prepared by "Newbery) ſhould be taken at intervals according to circumſtances."

In writing to Meſſrs. Newbery, he ſays:—

"I wiſh that your preparation was always uſed."

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This ſubſtitution muſt bring diſappointment, and of courſe deter Practitioners from preſcribing Dr. James's Powder, or lead them to regard it as a preparation on which no dependence can be placed.

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(a) Bulletin de l'Académie de Med. 1850, page 1015; Gazette Médicale, Aug. 17, 1850; Union Médicale, Aug. 15 and 22, 1850; Gazette des Hôpitaux, March 15, 1853, and June 10, 1854; Gazette Hebdomadaire de Médecine et de Chirurgie, Aug. 31, 1855; Revue de Thérapeutique Médico-Chirurgicale, Feb. 15, 1855; Abeille Médicale, Revue Clinique; Repertoire de Chimie et de Pharmacie; Annuaire de Thérapeutique pour 1851, Page 199; Orfila, Elements of Chemistry; Mialhe, Chemistry applied to Therapeutics, 1856, p. 319; Quevenne, Essay on the Physiological and Therapeutical Action of Preparations of Steel, page 97, 1854; Bricheteau, Treatise on Chronic Diseases seated in the Respiratory Organs; Soubeiran, Treatise on Pharmacy; Dorvault, Officine, &c. &c.

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ORIGINAL LECTURES.

LECTURES
ON
THE SPINAL CORD,
DELIVERED AT
The College of France,
DURING THE SUMMER SESSION 1860,

By M. CLAUDE BERNARD,
Member of the French Institute; Professor of General Physiology at the Faculty of Sciences, &c.

Lecture XII.

ON THE INFLUENCE OF THE NERVOUS SYSTEM IN THE CHEMICAL PHENOMENA OF LIFE.

Summary: Sensation and Motion not the only Phenomena of Nervous Action—The Chemical Operations of Life are equally placed under its Influence—No real difference exists between the Sympathetic and Cerebro-Spinal System—The Motor Fibres of Organic Life entirely similar to those which preside over Voluntary Motion—The only difference which exists between them is derived from the opposite characteristics of the Muscular Fibres to which they spread—All Chemical changes within the Economy obey the same Laws as those produced out of the Body—They belong, in general, to the class of Fermentations—Influence of the Vascular System in the Process of Secretion—The formation of Grape Sugar in the Liver adduced as an Illustration of this—The Muscular Fibres of the Vessels play an important part in all the Phenomena of Vital Chemistry—The Nerves only act as a Stimulus—Application of these Views to Pathology.

Gentlemen,—The phenomena of nervous action have, up to the present moment, been exclusively studied, in this course, with reference to their two principal divisions, sensibility and voluntary motion; but the part which devolves upon the nerves in the economy embraces a far more extensive field. The chemical reactions which occur within the living body are equally placed under their influence, and it is now full time to enter into this important section of our subject.

On taking a superficial view of the question, we might be tempted to believe that the nerves, which preside over the functions of organic life, are entirely distinct from the other parts of the system; and that, differing in their action from ordinary nerves, as they undoubtedly do, they differ also from these in their structure and intrinsic properties; a proposition which we will now proceed to examine (a).

The chemical phenomena which arise within our organs cannot, of course, be viewed as the result of a direct interference of the nervous fluid, producing in this case effects similar to those of the galvanic pile upon inorganic matter. The nerves can only act upon the tissues which lie in contact with their extremities, and are, so to speak, continuous with their own fibres; and the muscular apparatus alone fulfils this indispensable condition. The terminal ramifications of the nervous system do not float in the liquids of the economy, and a distinct mechanism is therefore required to enable them to modify the composition of these fluids. We find no difficulty in quoting a case in point. The peculiar kind of asphyxia which succeeds the division of the chief respiratory nerves does not arise from suspended chemical action in the lungs, but from the muscular paralysis which arrests at once the whole process of oxygenation of the blood. As to the division of the pneumogastric nerves, it does not affect the lungs, but disturbs the heart's motion, and produces coagulation in its cavities and in the large vessels.

The sympathetic nerve exerts an unquestionable influence on animal heat, on the secretions, on perspiration, and other phenomena of the same class; but, in reality, its action is confined to the vessels. It is, in short, the motor nerve of the vascular system—a fact which is readily proved by the usual test, for which we are indebted to Magendie and Muller. The characteristic property of a motor trunk, that which distinguishes it from a sensitive one, is that when divided it continues to produce its usual effects when a stimulus is applied to its peripheral portion; while in the sensitive roots the reverse is the case: the central extremity alone continues to act, the remaining portion of the nerve being completely paralysed. Now, the motor branches of the sympathetic nerve closely resemble ordinary motor nerves in this respect, since, after dividing them, the peripheral portion alone continues to act, when a stimulus is applied; you will therefore easily judge to which of the two great systems they must be referred. Anatomy confirms, in this instance, the data of physiology; for in all the tissues to which the ramifications of this nerve extend, we meet with elements possessing the contractile power. In the vessels, this property is known to be derived from the cellular fibres, which differ somewhat in their action from the striated ones: these latter obeying at once the nervous impulse, while the former are not so readily put in motion. A wide distinction, therefore, exists in this respect between the sympathetic and cerebro-spinal systems. The voluntary nerves, acting as they do upon the striatic muscular fibres, produce almost instantaneous effects, when excited; for the nervous fluid, as has been already stated, travels at the rate of more than sixty mètres (192 feet) per second. Far different is the result when the nerves of organic life are called into action: the elements placed at their command are not so easily roused from their torpor, and the effects of the stimulus are only perceived a certain time after its application; but (as a compensation) the impression is retained a few moments after the agent is withdrawn. Let us now consider how this influence exerted upon the vessels extends to some of the most important functions of life.

The chemical changes which take place in the fluids circulating through the system are strictly similar to those which are produced out of the body, and obey the same laws: but the chemist, who deals with inorganic matter, employs, in his laboratory, both acids and alkalies, heat, compression, and all the powerful agents which lie at his disposal; while Nature, in her operations, avoids the use of such violent means, which would destroy at once the delicate tissues exposed to their action: she has, therefore, recourse to catalysis, and by creating the peculiar substances known under the name of "ferments," she fulfils her purpose in a more appropriate manner. The history of this elaboration is no less interesting to the chemist than to the physiological observer; but while the first is busy with the reactions produced and the compounds obtained, the second remembers that the living frame is the seat of the whole process, and endeavours to ascertain the mechanism which leads to the final result. If the characteristic property of muscle is the power of contraction, the power of secretion is evidently that of glands: the accumulation of a peculiar compound within its primitive cells, is the exclusive privilege of the glandular tissue; a watery menstruum is then poured forth to dissolve this substance, and convey it into the excretory ducts. But in creating the active principle of each particular secretion, a proper supply of blood is indispensable, for as long as the ferment is not placed in contact with the matter on which Nature intends it to operate, the transformation cannot take place; as long as emulsine and amygdaline are kept apart, prussic acid is not engendered; if, therefore, secretion is viewed in the light of a chemical process, we find motion to be required in the accomplishment of this act; but this power resides in the muscular fibre alone. A well-known instance of vital chemistry may be advanced as an illustration of this. Grape-sugar is produced in the liver by the action of diastase upon starch in the cells of the gland. If the local circulation is accelerated by relaxation of the vessels, each glandular element will receive, in a given space of time, a larger supply of blood than before, and a larger amount of sugar will be produced, especially as the temperature rises, in consequence of the flow of blood to the part. The nervous system is thus enabled to arrest or accelerate the process; for, as you will soon have the opportunity to see, there exist nerves which dilate the vessels (b) as well as nerves which contract them; but, in either case, the muscular fibre is called into play, and a new chemical compound is created through its action. The nervous system acts in this case as a mere stimulus, a view which Haller adopted long before the present time: it never creates new elements in the tissues, but sets forth their characteristic properties: and the muscular apparatus is the only medium through which it exerts its influence. The chemical part of the process of secretion results from the mutual action of two substances

(a) *Vide* Lecture IV., On the Distinction between Functions and Properties.

(b) *Vide* Lecture XIV.

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brought into contact with each other; as to its physical causes, they appear to be connected with certain modifications in the phenomena of endosmosis, arising from the alternate contraction and dilatation of the vessels.

The application of these views to practical medicine will form the subject of our next Lecture, in which we intend to show that salivation, diabetes mellitus, Bright's disease, and a host of other affections, are intimately connected with certain anatomical lesions of the Spinal Cord.

ORIGINAL COMMUNICATIONS.

RESULTS OF SOME TRIALS OF THE HYPOPHOSPHITES IN THE TREATMENT OF PHTHISIS.

By JAMES RISDON BENNETT, M.D.
Late President of the Hunterian Society.

However far we have hitherto fallen short of unravelling the many important problems involved in the study of tubercular diseases, it must be admitted that during the last fifty years we have acquired considerable additions to our knowledge, both of the natural history and therapeutics of tubercular phthisis. In proof of this, it is sufficient to refer to the ever memorable researches of Louis. Setting aside all that has since been done, though it is neither little nor unimportant, it may be confidently asserted that almost all the advance that has been made towards the prevention and cure of this sore scourge of civilized life may be traced to the recognition of the all important fact, first fully established by Louis, that phthisis is a disease of constitutional origin and nature.

It is admitted, on all hands, that the great problem now to be solved is, What is the real nature of that constitutional derangement which precedes the manifestation of tubercle? What are the deviations from the healthy standard in the assimilative and nutritive functions by which the phthisical constitution is induced and transmitted? Any rational attempt to solve so important a problem should be hailed with delight, and almost any alleged solution deserves unprejudiced consideration and careful testing. The various remedies and procedures that are almost daily thrust on our attention by their sanguine, interested, or ignorant advocates, are, for the most part, such as neither justify nor receive much attention from the well-informed and thoughtful Physician, simply because their remedial influence is too often manifestly directed merely to some of the consequences of the disease, or the palliation of certain symptoms. The public, indeed, attach an exaggerated importance to such things, and may well be pardoned when, in many instances, they accuse us of prejudice and illiberality because we do not at once adopt the last novelty and join in their plaudits of the new benefactors to mankind.

It behoves us, therefore, to prove that we are not negligent of any new views or plans which have any show of rational claim to consideration, — that we do not err on the side of irrational scepticism. We are not justified in the present state of our science, in insisting that any alleged remedy for such a disease as phthisis shall meet all our supposed requirements before we give it a trial, or to say that it is undeserving of attention, either because it does not coincide with our own preconceived theories, or even harmonise with the theory of its propounder. I do not, therefore, propose to consider whether the remedies for phthisis, lately introduced by Dr. Churchill of Paris, are, or are not, such as would commend themselves to notice on theoretical grounds, or whether the theory which he propounds be tenable or not. But inasmuch as they are presented to us as remedies whose action must be supposed to be constitutional and of whose capability of modifying the nutrition and altering the constitution of the tissues and humors of the body, there is perhaps no *à priori* improbability, they claim I think a fair trial. Whether they can be said to have had such trial, in this country already I am not sure. General report I believe, says that they have failed to justify that confidence which Dr. Churchill claims for them, and Dr. Quain, I know, has published the results of some trials made at the Brompton Hospital which are not favourable. But I purposely avoided making particular reference to my reports of others before testing the remedies for myself. I have contented myself simply with ascertaining what was Dr. Churchill's own method of procedure. My cases have been taken without any selection, except that those which presented urgent special symptoms requiring immediate attention were not considered eligible. The twenty cases I propose submitting to the consideration of the Profession are those of which I happen to have notes more or less complete and in which the hypophosphite of soda was the remedy given. The hypophosphite of lime I have also used, but cannot just now give the detailed results of my trials of this salt, although I may say generally that they do not appear to differ materially from those of the soda salt. Of the two, however, I am disposed to prefer the hypophosphite of lime.

Before detailing my cases, it may be desirable to state briefly what Dr. Churchill's theory is. He supposes that tubercular diseases have their origin in a diminution of the oxidisable phosphorus contained in the body, and he endeavours to supply this deficiency by the administration of the hypophosphites of lime and soda, which he says, he has found by experiment to be the forms best adapted for ensuring the absorption and assimilation of the deficient element, while the hypophosphite of lime, by supplying another element assumed to be deficient in the tubercular constitution, he thinks specially adapted to certain cases. The different hypophosphites differ somewhat in their effects; the salt of lime, he says, tends to repress the secretion from the lungs, while the salt of soda has not this effect, and the salts of potash and ammonia increase the expectoration. It remains to be seen, Dr. Churchill says, whether the hypophosphorous acid alone has not in certain cases, a different therapeutic action from that of the salts, but ferruginous preparations given in combination with it, have generally tended to excite hæmorrhage. Hypophosphite of quinine deserves especial attention, but it is more especially for the hypophosphites of lime and soda that he claims the title of specifics, both remedial and prophylactic in the tuberculous diathesis. Such are the principal allegations adduced by Dr. Churchill in support of his practice. Obliged to admit that the researches of Andral, Gavarret, and others, have failed to demonstrate any alteration in the composition of the blood, as regards its organic constitution, peculiar to phthisis, he concluded that the special condition of the tubercular diathesis would be found in the inorganic constituents. What this special condition might be, Dr. Churchill concluded therapeutical experiments could alone decide. Eliminating various inorganic elements, whose therapeutic influence had been already, in his opinion, sufficiently tested, he proceeded to experiment on phosphorus and its compounds, without, however, adducing any evidence to show that the phosphorus compounds are actually deficient in the tuberculous habit, and apparently ignoring the direct evidence of Becquerel and Rodier, that the principal phosphatic salt, viz. the phosphate of lime, is actually present in an increased quantity in the blood of phthisis, that in fact it is in its minimum proportion in health, in the physiological state. It is also affirmed by Beneke that in all cases of tuberculosis with emaciation, the earthy phosphates in the urine are increased. In one experiment of Bratler, however, quoted by Dr. Parkes, there was an unusual diminution in the amount of this principle in the urine of a phthisical patient who at the time was gaining flesh. If, therefore, we should even admit the correctness of the opinion of Dr. Owen Rees, in reference to the *rôle* which phosphorus plays in the process of arterialisation in the lungs and in the constitution of the red globules, we have no evidence, that I am aware of, to show that the diminution of the red globules in phthisis is due to a deficiency of phosphorus in the system. It is, however, worthy of notice as remarked by Dr. Theophilus Thompson, that cod-liver oil, certainly one of the most valuable remedies that we possess for tuberculosis, contains phosphorus. But Dr. Thompson's own experiments in the administration of phosphorus in phthisis, did not encourage the notion that it possessed any specific therapeutic action, and we are, I believe, without any evidence to show that the good effects of cod-liver oil are in any way attributable to the phosphorus that it contains. In fact, almost all that we can be said to know of its action on the nutrition of the body is, that patients get fat while taking it, and that in some way or other, it appears to diminish the disintegration of nitrogenous tissues. The dilute phosphoric acid, though often agreeing

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very well, sometimes better than the other mineral acids, has not in my hands proved to have any specific virtues.

Of the twenty cases which I now bring forward, there were only nine in which the disease did not steadily advance while under treatment, or in which there was any evidence at all of improvement. Of these nine, four only manifested any decided improvement, of the permanency of which, however, I have no proofs in any one instance. The following are the three most favourable cases:—

Robert F., aged 21, footman. Residence, Bristol, was admitted into the Victoria-park Hospital, February 20, 1860. His previous health had been tolerably good. Weight, 10 stone 5 lbs. Present illness dates from six months ago; but he has had cough much longer. Three weeks ago had severe hæmoptysis, and, since that, cough with scanty expectoration and much sweating and debility. Appetite poor. Tongue tolerably clean. Bowels regular. Pulse 84. Cough not urgent. The physical signs were deficient resonance, harsh respiration, prolonged expiratory murmur, and marked cough resonance under the right clavicle. He was put on mixed diet, with half-a-pint of porter, and ordered fifteen grains of hypophosph. sodæ three times a-day in infusion of quassia. The liq. vesicatorius was applied at intervals underneath the clavicle. On April 3 he had improved considerably, having gained seven pounds in weight, and lost his cough and subclavicular pains, together with the most marked physical indications of obstructed lung. He was noted on admission as presenting evidence of phthisis passing into the second stage, and on his discharge as a case of arrested phthisis. As he took no other medicine during his stay in the Hospital than the hypophosphite of soda in infusion of quassia, and the only other remedial means employed was a little counter-irritation beneath the clavicle, the case may, perhaps, be claimed by the supporters of the new specific as an illustration of its efficacy. But all who are familiar with the early history of phthisis must have met with many such cases, equally favourable to the more ordinary modes of treatment. It was manifestly a very early case—the general symptons did not denote serious constitutional disturbance, and, I believe, the improvement might fairly be referred to the regulated living and comforts of the Hospital, and the use of counter-irritation.

The second case is that of James D.

James D., a draper's assistant, residing in Pentonville, aged 44, was admitted March 17, 1860. He stated that he had been out of health four years, and worse for the last six weeks. Four years ago he had rather profuse hæmoptysis. For four months has had a troublesome cough. Has never had very robust health. His mother died of phthisis. He is a spare man, of nervous temperament. Height, five feet eleven; weight, 8 stone 12½ lbs. Tongue slightly coated, flabby. Bowels regular. Appetite good. Cough frequent; expectoration scanty. Pulse 108. Chest flattened generally in front. Respiration harsh in both apices; but no other physical signs of pulmonary disease. He was placed on mixed diet with half-a-pint of porter, and ordered fifteen grains of the hypophosphite of soda in water three times a-day. This was the only medicine that he took during the whole time that he was in the Hospital. On May 1 his general health had much improved, and he had lost his cough. He had also gained 14 lbs. in weight. On May 6 he was discharged.

The physical signs in this case might, perhaps, admit of doubt as to its real nature; but the previous history of the man, the hereditary tendency, and the general aspect, when considered in connexion with such symptoms as he presented on admission, cannot leave much room for doubt that he was really the subject of pulmonary phthisis, and as the improvement was very marked, and I have heard nothing of the man since he was discharged, we may give him to Dr. Churchill as an example of the efficacy of his specific.

The third of the most favourable cases is that of Robert D.

Robert D., aged 27, an interpreter, residing in Hatton-garden, admitted March 28, 1860. He stated that he had been ill three years, having had more or less cough all that time, and hæmoptysis eighteen months ago; his general health declining. The expectoration has latterly been considerable. There is no history of phthisis in his family, and he himself has enjoyed good health till three years ago. He is naturally of fair complexion, and now pale and much emaciated. The digestive organs are in fair order, the tongue being clean; the bowels regular, and the appetite good; but the pulse is rapid and feeble, and the cough urgent at night. His height is 5 feet 4 inches, and weight 7 stone 11 pounds. Physical examination of the chest indicated tubercular disease in both lungs, there being dulness and cavernous sounds in the left apex, with more or less crepitation over the whole of the anterior of the lung on the same side, and on the right side deficient resonance over the apex, and some loose crepitation in the dorsal region.

He was put on mixed diet, with an egg for breakfast, and half-a-pint of porter daily. The only treatment adopted, consisted in the administration of a sedative draught at bed-time containing a little chloric ether and morphia (which he took for several nights, with great relief to his cough), and grs. xv. of the hypophosphite of soda in infusion of quassia, three times a-day. This treatment he continued till the end of April, when he expressed himself as in all respects better, and anxious to go out. His cough was certainly considerably relieved, and his expectoration less; but he had not gained one ounce in weight, and the physical signs were much the same, except that there was less crepitation to be heard. This man reappeared some time after as an out-patient, when I learnt that he had been under the care of Dr. Churchill, in Paris, the year before, and that he considered himself to have benefited by the treatment then adopted. But although his own opinion was that the medicine had done him good while in the Victoria-park Hospital, as there was no evidence of the disease being arrested, I placed him this time on the usual tonic plan, and soon lost sight of him again.

I have tried the remedy in numerous other cases besides those of which notes have been preserved, but have not been able to discover that it has exerted any special influence on any one function of the body, unless, indeed, it be on the digestive function. In many instances the tongue has improved in appearance, and the appetite increased, while the patients have been taking the remedy. But I question whether this has not been as much from the abstinence from all remedies capable of deranging the stomach, as from any direct influence exerted by the phosphatic salt. Where the stomach has been irritable, or where the state of the system has been such that all tonics have more or less disagreed, and where, consequently, these have been abandoned, temporary improvement has often followed the exhibition of the hypophosphites. In many of these instances the patients would probably have been as well with a little lime-water, citrate of potash, or any other equally innoxious agent. And, indeed, it often enough occurs in the course of the treatment of phthisis, that patients are for a time, at least, better without any medicine, simply regulating their diet. But even assuming that the new remedy has been useful in allaying irritability of the stomach, or improving the digestion, such effects often result from small doses of the alkalies, and may, therefore, in all probability, be referred, in the instances in question, to the base, rather than to the acid with which it is combined. In some cases, increased secretion of urine followed the use of the remedy, but this increase was not more than might be accounted for by the subsidence of febrile disturbance. In no case did I find that the urine was rendered acid, but in some instances it became slightly alkaline, or neutral, where it had before been acid. In no instance was there any evidence of excitement of the pulse, or tendency to hæmoptysis induced, nor any direct sedative influence exerted on the local pulmonary irritation. Hæmoptysis has, indeed, occurred while the patients have been taking the remedies, but in circumstances not justifying the belief that the remedy had anything to do with exciting the hæmorrhage.

The hypophosphite of lime, I have said, has appeared to me, on the whole, more useful than the salt of soda. Lime-water is well known to be very useful in many cases of gastric derangement, attended by nausea, vomiting, or gastralgia, and I have lately given, with advantage, in many such cases, a saccharine solution of lime, prepared for me by Messrs. Warner and Barclay, according to a formula recommended by Dr. Clelland, in the *Edinburgh Medical Journal*, for August, 1859. In several instances where the irritability of both stomach and bowels has been such as to interfere with all treatment, and with the taking of the most simple food, and where, consequently the emaciation and debility have rapidly increased, I have found the saccharated solution of lime, in doses of from twenty to thirty minims, three times a-day, prove of signal service. And it has appeared to me to act, not merely as an antacid, but as a tonic. I think it,

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therefore, extremely probable that the hypophosphite of lime will prove in many cases a useful remedy in the treatment of phthisis, acting beneficially on the stomach and intestinal mucous membrane, and, as Dr. Churchill affirms, on the pulmonary mucous membrane, diminishing the expectoration, and giving tone to the capillaries.

But I am bound to say, that I have seen no more evidence of any specific anti-tubercular action exerted by the salt of lime than by the soda salt. No one will be inclined to question the great value of tonics in the treatment of phthisis, and among the poor, or those who have either neglected or mismanaged themselves under the false notion that tonics and good living are not suited to the cough, and other symptoms attendant on phthisis, it is often marvellous to observe the rapid improvement, and perhaps, apparent cures, that follow on the administration of tonics. But it is not less true, that we meet with many cases of phthisis where tonics are not borne, and where their action is even highly injurious. This is especially the case with steel, which is often very injudiciously given. A trial of the hypophosphites may be useful in elucidating the benefit that accrues, in many instances, from a temporary, or even an entire, abandonment of all tonics, and adherence to regulated diet, and all the various hygienic means, of such paramount importance in the management of all cases of tubercular disease.

(To be continued.)

ON

PARASITIC AFFECTIONS OF THE SKIN.

By T. McCALL ANDERSON, M.D.

Fellow of the Faculty of Physicians and Surgeons of Glasgow, &c.

No. VII.

The only other affection of the skin of vegetable parasitic origin which remains to be mentioned is

Pityriasis Versicolor,

(Disease due to the presence of the microsporon furfur.)

Chloasma. Maculæ hepaticæ. Leberflecke. Éphélide hépatique (Alibert). Taches hépatiques. Crasses parasitaires.

Pityriasis versicolor is by no means the least interesting of the parasitic affections of the skin. It is very curious that vegetable structures which differ from one another so very slightly in appearance, so far, that is to say, as the microscope reveals to us their structure, are capable of producing, on the skin, diseased appearances so very different. It shows us that vegetable, as well as animal, structures, no matter how low in the scale, are much more at variance with one another in their habits (if I may be excused the expression), and in the material which is necessary for their nourishment and germination than their apparent external configuration would lead us to expect. Pityriasis versicolor is one of those diseases whose name is very apt to mislead one with regard to its nature, for it has nothing in common with the ordinary pityriasis,—a disease which has quite a different aspect, and is altogether unconnected with a vegetable formation.

The affection is very easily recognised. It may occur on any part of the skin; it is *most rarely* met with in the face, but very frequently on the skin of the neck, chest, and abdomen. It seems, therefore, to have a great predilection for those parts of the body which are habitually covered by clothing, and in confirmation of this statement is a case seen by Gudden of a young man who went with his chest uncovered, and who was attacked "all round" by the fungus, whilst the "open space" remained unaffected (a). It commences by little spots about the size of a pin's head, which gradually extend circumferentially, retaining the circular form as they increase, but not healing in the centre as in the case of Herpes circinatus. These spots gradually unite, and the circular form is then lost, there being thus produced large irregular patches which may extend till almost the entire skin of the trunk becomes affected.

On examining one of these patches, it will be found that the skin is scarcely at all elevated above that of the surrounding parts, but that it has a peculiar brownish colour, which when once seen can never be forgotten. The depth of tint varies much. It is sometimes so light as to differ only slightly from that of the healthy skin; sometimes so dark that it is almost black,—hence the name Pityriasis nigra which has been applied to this variety, and which is only met with in those having very dark complexions. The colour usually resembles that of diluted bile, hence the names taches hépatiques and éphélide hépatique which have been applied to it, but the disease has no connexion whatever with hepatic disorder, as was supposed at one time.

On passing the hand gently over the diseased surface, it is found to be less smooth than the healthy skin, frequently it is seen to be the seat of a very fine desquamation, and whether this be the case or not, it may be produced readily on scratching the parts, showing that the epidermis is not in a normal condition. The scales removed have a yellowish colour when contrasted with the white scales of the true scaly diseases (pityriasis vulgaris, psoriasis, etc.) In general the itching is only slight, and there are no fixed times when this is more annoying than at others, as in the case of the animal parasites, in which the pruritus is most intolerable at night.

Causes.—There is much difference of opinion with regard to the causes of pityriasis versicolor. To me, it appears essentially parasitic in nature, and due to the presence of a vegetable growth discovered by Eichstädt, in 1846, and denominated the *microsporon furfur*. On putting a little of the desquamated matter under the field of the microscope, and adding a drop of liquor potassæ to render the epithelium more transparent, numerous epithelial scales are detected mingled with the spores and tubes of the parasite. The spores are oval or rounded, and of considerable size. Some of them are isolated. Others are united to one another at their ends, forming branched chains or valvular tubes, and, besides these, some simple or ramified non-valvular tubes are met with, having, however, frequently, spores at their extremities. (See Fig. 11.) These spores and tubes are found also on the

Fig. 11.

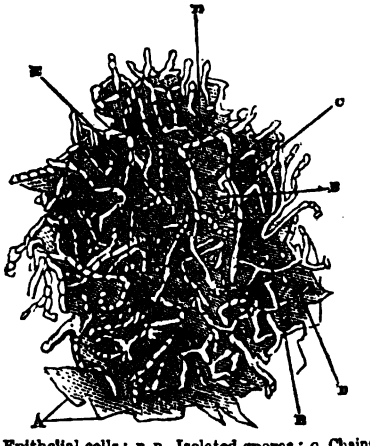

Fig. 11.—A, Epithelial cells; B B, Isolated spores; C, Chains of spores; D D, Tubes and spores at their extremities; E, Tubes without spores at their extremities.—(Bazin.)

hairs and in them, though not to the same extent as in herpes tonsurans.

There is some dispute as to whether pityriasis versicolor is a contagious affection or not, and those who think that it is non-contagious, use this as an argument against the parasitic nature of the disease. But it is *without doubt* contagious, and there are many instances of this. One of the most conclusive is the following, related by Mr. Startin (b):—"John D. Tomlins, aged 30, a very stout and healthy footman, had been troubled with the eruption for four years; it affected the entire chest and abdomen. Two years ago he married, and in a few weeks' time, the spots appeared on his wife's breast. He went to America with his master, and his wife returned to her own family. Out of four sisters, with all of whom she occasionally slept during her visit, an eruption of precisely the same nature appeared in three. They were all grown up and in good health. In the whole five of these

(a) "Manual of Animal and Vegetable Parasites," by Frederick Küchenmeister (Sydenham Society's Translation, vol. ii. p. 159).

(b) See *Medical Times and Gazette* for 1853, Vol. ii p. 630.

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patients, the eruption was attended by much itching. The man's statement, as regarded his wife, was confirmed by personal inspection, but the sisters were not seen. There did not appear, however, any reason for doubting the correctness of the account given." Many other cases like the above might be given. I had the opportunity only yesterday of witnessing an equally conclusive case at the Dispensary for Skin Diseases. Three girls came to me, all of whom were affected with well marked and extensive patches of pityriasis versicolor. I examined the scales which were scraped off from one of them with the microscope—the others I did not think it necessary to investigate—and detected the parasite, with the characters above given, quite distinctly. Two of these girls were sisters, who slept together. The third was merely in the same warehouse with them, so that it is doubtful if she contracted the disease from the same source, and, indeed, she told me that she got it by sleeping with *her own* sister, who is likewise affected. While, therefore, there ought to be no doubt as to the contagiousness of pityriasis versicolor, it is equally certain that it is not so contagious as some of the other parasitic affections, else we would not meet with so many instances of husbands affected with the disease, who have not communicated it to their wives, and *vica versa*. This leads me to state my belief that it is necessary to the development of the parasite that the constitution of the person attacked be favourable to its growth. The nature of this peculiar state of system is not quite thoroughly understood. And I believe that the reason why this disease is more feebly contagious than other parasitic affections is, that few persons supply a soil favourable to the germination of the parasite.

Pityriasis versicolor is met with among the higher as well as among the lower classes. But I believe, notwithstanding, that filthiness plays, in most cases, a very important *rôle* among the predisposing causes of the affection. People are very apt "to wear the same flannel next their skin for a week, a fortnight, three weeks, and, among the poor, even a month. And it is by no means an uncommon thing for them to wear the same flannel night and day, not once removing it from the moment it is put on till the time it is considered to be desirable to have it washed. The consequence of such habit is an accumulation on the surface of the skin of its secretion, and of undetached epithelium, and the consequent formation of a nidus favourable to the growth of the microsporon *furfurans*." (c). And I am quite of Dr. Jenner's opinion that the reason why pityriasis versicolor is so often met with in scrofulous persons is, not that scrofula predisposes to the disease, but that it predisposes to dirtiness, persons so affected frequently wearing the same flannel day and night, and neglecting to wash the body for fear of bringing on, or increasing already existing, disease of the lungs.

Children are very rarely attacked, and males and females appear to be susceptible of its influence in an equal proportion. Some dermatologists affirm that irritation of the uterine organs and pregnancy are predisposing causes, but I suspect that, in making this assertion, they have mistaken ephelis for pityriasis versicolor, the former being a very different affection, and altogether independent of parasitic growth. Alibert was evidently of opinion that pityriasis versicolor was often dependent on disease of the liver (d). This mistake evidently arose in part from his having noticed a coincidence of several cases of pityriasis versicolor and hepatic derangement, and partly from an idea that, as the colour of the eruption has a great resemblance in many instances to that of bile, there must be some connexion between the cutaneous affection and diseases of that organ.

Diagnosis.—After having seen one case of pityriasis versicolor and having had its characters accurately pointed out, its diagnosis should be quite easy. The seat of the eruption, on the trunk—its irregular form—its peculiar colour—its very slight elevation above the level of the surrounding parts—the slight itching—the scanty but always producible desquamation by scratching, the scales being fine and yellowish in colour, and the detection of the parasite with the microscope, are characters which ought to leave no doubt as to the nature of the affection. And yet there are diseases which, not unfrequently, are mistaken for it.

When, for instance, the patches of pityriasis versicolor have so united to one another by circumferential extension that they enclose portions of sound skin there is some resemblance to vitiligo, the characters of which affection were stated shortly when treating of the diagnosis of alopecia areata. In such a case as that above described it is only necessary to examine attentively the affected spot, when we find that, in pityriasis versicolor, the yellow-coloured portions of skin are slightly elevated, itchy, and scaly, and amongst the scales the parasite is detected, while in vitiligo the coloured patches are merely owing to an excess of pigment, with no elevation of surface, no itching or desquamation, and no parasite is to be found. And besides, on examining the enclosed portions of pale coloured integument, we find that in pityriasis versicolor it has the same colour as the skin of other parts of the body, while in vitiligo it is much whiter than the normal cutaneous envelope. In addition to this, vitiligo is generally congenital, and is only a deformity, an abnormal distribution of pigment, and incurable, while pityriasis versicolor is rare in children, is a veritable disease, and can generally be with facility removed—at least temporarily.

The affection denominated *Ephelis* has also been mistaken for pityriasis versicolor. The former is merely an excessive deposit of pigment on different parts of the skin producing brown-coloured patches, and owing to exposure of these parts to the sun. This name has also been employed to denote patches of skin loaded with pigment, and dependent on the derangements of menstruation and on pregnancy(e). But the dissimilarity between these two affections is so great that it is not necessary to insist further, and to avoid mistakes it merely requires to be borne in mind that such errors have been committed.

The common pityriasis (*pityriasis vulgaris, seu alba*) has been mistaken for pityriasis versicolor, the only similarity between these two affections being probably in the name, for in the former disease, the scales are much more abundant, thicker, and larger; there is not that yellow colour either, which is so prominent a character in pityriasis versicolor and no parasite can be detected.

The *Prognosis* is favourable as regards life. By appropriate treatment also the affection can almost invariably be removed, although, in many cases, relapse may occur, owing either to the treatment having been stopped before the parasite was completely destroyed or to a renewed exposure to contagion, as, for instance, by using flannel which had previously been impregnated with the parasite. Even if the disease cannot be removed, it is only annoying in so far as it causes itching and is a disfigurement.

The *Treatment* is very simple, and generally efficacious. Attention must be paid to the general health, and any apparent deviations corrected.

Besides attending to the general health, we must attack the local affection by local means, and this constitutes the principal part of the treatment. In cases when there is much hair on the affected parts depilation must be had recourse to, in the same way and for the same reasons as in Herpes tonsurans; but this is rarely necessary, because the disease attacks the trunk in the great majority of cases which is only abundantly supplied with hair in persons who are very hairy.

Generally, the application of a solution of bichloride of mercury (two grains to the ounce of water) to the affected parts once or twice daily and continued for some time after the eruption has disappeared is effectual. Mercurial or sulphur vapour baths have the same effect, and a very good and efficient mode of treatment is to combine the application of a mercurial lotion with the use of a sulphur or mercurial vapour bath. Care must be taken, however, in the case of the latter, to avoid salivation, which is altogether unnecessary, and, therefore, improper. The other parasiticides mentioned in previous papers are also effectual. But, whatever parasiticide is employed, great attention must be paid to the continuance of its application for some time after the eruption has disappeared, else relapses are pretty sure to occur.

Hebra's treatment is very simple and very good. He orders the patient to take a bath, then to rub the parts affected intensely with black soap on flannel, then to wash off the soap and make use of the cold douche. This is to be repeated every day for a week, and then discontinued. A cure is in

(c) Clinical Lectures on Diseases of the Skin. By Wm. Jenner, M.D. *Medical Times and Gazette* for December 26, 1857, p. 651.

(d) "Précis théorique et pratique sur les Maladies de la Peau." Par M. J.-L. Alibert. Ed. 2. Tome premier, p. 413.

(e) "Leçons sur les Maladies de la Peau." Par le Docteur Hardy. Douxième partie, 1859, p. 4.

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this way generally effected; but if, on stopping the treatment, the disease reappears, it must be repeated.

In cases where there have been many relapses, arsenic has been given internally, and persevered in for some time, with the view of changing that state of system favourable to the growth of the vegetable.

Finally, great attention must be paid to cleanliness during and also after the cure. Flannel which has been used should either be laid aside altogether or washed in water containing a parasiticide. The patient should also change his flannel clothes very often, and in no case should he sleep in them.

The only remaining affection of the skin of *supposed* vegetable parasitic origin is *Plica polonica*, which is very rarely seen in this country. But I quite agree with Hebra in thinking that it is not a disease any more than a dirty skin, for I believe the matting together of the hair to be owing to the person's neither washing or combing his hair; and it is not surprising that in such cases the spores of fungi floating about in the air should be deposited on the hair, and thus give rise to the idea that Plica polonica is a disease of parasitic origin.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

CONDUCTED BY
JONATHAN HUTCHINSON,
Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital,
AND BY
J. HUGHLINGS JACKSON, M.D.

STATISTICAL REPORT OF OPERATIONS PERFORMED DURING THE YEAR 1860.

THE subjoined Report comprises the cases supplied by the following Provincial Hospitals:—

The Derby, Leeds, Leicester, Sussex County, Addenbrooke's (Cambridge), Nottingham, Chester, Cheltenham, West Norfolk and Lynn, Sheffield, Hull, York, Northampton, and Gloucester.

AMPUTATIONS OF THE UPPER EXTREMITY.

Case 1.—The Cheltenham General Hospital: Dr. Wright.—A boy, aged 6. Hand, forearm, and upper arm crushed by a thrashing machine. The soft parts were lacerated up to the shoulder. He had lost a great deal of blood before he arrived at the Hospital. Amputation was performed immediately, close to the neck of the humerus. He died a month later of phlebitis and pyæmia. *Case* 2.—The Cheltenham General Hospital: Dr. Wright.—A boy, aged 11. Amputation of the wrist-joint, in consequence of a crushed hand by machinery. Recovery. *Case* 3.—The Leeds Infirmary: Mr. Teale.—A man, aged 18. His left arm was crushed by a train. Amputation (rectangular) below the shoulder seventeen hours later. In two days severe bronchitis set it, and at the end of a week erysipelas attacked the stump, and spread to the neck and head. He, however, recovered well, with an excellent stump. *Case* 4.—The Leeds Infirmary: Mr. Smith.—A boy, aged 11. His arm had been torn off by machinery immediately below the shoulder. Amputation was performed. The head of the humerus being left, considerable sloughing took place posteriorly. He ultimately obtained a good stump. *Case* 5.—The Leeds General Infirmary: Mr. Smith.—An engine-driver, aged 30. Amputation (rectangular) in the upper third of the arm, for smash of the elbow and forearm. Recovery. *Case* 6.—The Leeds Infirmary: Mr. Smith.—A man, aged 34. Double flap amputations in upper third of arm, for smash of arm and forearm. Rapid recovery. *Case* 7.—The Leeds General Infirmary.—A man, aged 20. His arm was torn off above the elbow by machinery. Amputation (rectangular). He recovered rapidly with a good stump. *Case* 8.—Addenbrooke's Hospital (Cambridge): Mr. Lestourgeon.—A healthy looking lad, aged 13, admitted for disease of the wrist-joint of three months' duration. Ulceration of cartilages, caries of bones of the carpus, and of one or two metacarpal bones. Amputation (circular). Recovery. *Case* 9.—Addenbrooke's Hospital (Cambridge): Mr. Lestourgeon.—A strumous looking girl, aged 16, was admitted for extensive disease of the right wrist-joint (caries of all the bones of the wrist and adjacent ends of the radius, ulna, and metacarpal bones). It began, without any apparent cause, one year and a-half before. Amputation (Teale's) Recovery. *Case* 10.—The Chester Infirmary: Mr. Brittain.—A man, aged 21. Laceration of the right hand and wrist by machinery. Amputation (circular) above the wrist, the medullary cavities of the ulna and radius not having been exposed. Recovered. *Case* 11.—The Chester Infirmary: Mr. Weaver.—A weak, strumous lad, aged 16, looking almost worn out by suffering. Disease of the right elbow-joint, said to be of only three months' date. There were sinuses communicating with diseased bone. As the general health was manifestly giving way, the limb was removed through the upper arm by the double flap operation. Recovered. *Case* 12.—The Chester Infirmary: Mr. Essex Bowen.—A man of sallow complexion, aged 43. He was a cooper, and in his work the muscular cushion of the thumb was often bruised. On the day of operation (April 28, 1860), there was a bleeding fungoid growth the size of three oranges upon the left thumb, apparently arising from the metacarpal bone of the thumb. The neck was limited but concealed by the overhanging of the tumour. For several months he had observed tenderness and occasional abrasion of the skin in this position. Within the last three weeks, however, the increase of the mass had been rapid and the hæmorrhage frequent and alarming. Amputation (flap) was performed through the forearm. His strength rallied in a few days. He left the Hospital on May 22 with a sound stump. The tumour presented all the microscopic appearances of encephaloid cancer. The man died suddenly on September 28, the arm remaining sound. *Case* 13.—The Chester Infirmary: Mr. Essex Bowen.—A healthy-looking boy, rather small for his age, of ruddy complexion and sound general health. He had had an obscure swelling of the upper part of the right forearm coming on for six months, during the whole of which time there was increasing pain. He was under observation for six weeks prior to the operation. At the commencement of this period the whole of the forearm was swollen and hard, the enlargement being greater in the upper third. There was no redness, simply a brawny enlargement. The superficial veins were distended. As the disease progressed, the skin presented livid patches over the more prominent parts of the tumour. The skin subsequently gave way, exposing bleeding fungoid granulations. November 8, 1860, amputation (circular) through the forearm. The boy left the House with a sound stump, and in rude health. The tumour was microscopically demonstrated to be of an encephaloid nature. He was discharged well December 16, and remains well (March 19, 1861). *Case* 14.—The Nottingham Hospital: Mr. Wright.—A boy, aged 7, compound fracture across the condyles of the humerus, opening into the elbow-joint. The neighbouring parts were much injured, and no pulsation could be felt at the wrist. Amputation about the middle of the upper arm by anterior and posterior flaps. *Case* 15.—The Nottingham Hospital: Mr. White.—A man, aged 56. Compound fracture of the humerus and forearm by a machine. The integuments and soft parts were much lacerated. Amputation was performed about the middle of the humerus, by two lateral flaps. There was considerable hæmorrhage from the medullary canal. This was stopped by the perchloride of iron. Recovery. *Case* 16.—The Leicester Infirmary: Mr. Macaulay.—Smash of the hand by machinery. Primary amputation (circular) just above the wrist. Recovered. *Case* 17.—The Leicester Infirmary: Mr. Macaulay.—A girl, aged 13. Disease of the elbow-joint, necrosed bone and suppuration, attended by great pain. It followed an injury received some months before. She was greatly emaciated and feeble. Recovered speedily. After removal, the cartilages were found to be eroded, the bones softened, some pieces being necrosed: sinuses ran down the forearm for some distance. *Case* 18.—The Leicester Infirmary: Mr. Benfield.—A healthy man, aged 27. Hand and wrist smashed by machinery. Primary amputation (circular). He had smart secondary hæmorrhage, stayed by cold and pressure. *Case* 19.—The Leeds Infirmary: Mr. Hey.—A girl, aged 19. Amputation (rectangular) through the middle

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of the forearm, for machinery accident. *Case* 20.—The Leeds General Infirmary: Mr. Hey.—A boy, aged 14. Amputation (rectangular) through the middle of the forearm, for smash of the hand and wrist. Rapid recovery. *Case* 21.—The Leeds General Infirmary: Mr. Teale.—A boy, aged 12. His hand had been chopped off. Amputation (rectangular) through the middle of the forearm. Rapid recovery. *Case* 22.—The Leeds General Infirmary: Mr. Hey.—A boy, aged 8. Amputation (rectangular) through the middle of the forearm, for smash of the hand and wrist. Rapid recovery. *Case* 23.—The Derby Infirmary: Mr. Gisborne.—Amputation of the forearm. Recovery. (See Case 2, Ligature of Arteries.) *Case* 24.—The Derby Infirmary: Mr. Gisborne.—A man, aged 23. His arm had been torn off by machinery. Primary amputation of the right upper-third of the arm. Recovery. *Case* 25.—The Derbyshire General Infirmary: Mr. Gisborne.—Disease of the wrist-joint. Amputation by long anterior flap. Recovery. *Case* 26.—The Derbyshire General Infirmary: Mr. Johnson.—A boy, aged 9. Amputation through the wrist-joint, for injury by machinery. Recovery. *Case* 27.—The Derbyshire General Infirmary: Mr. Johnson.—A man, aged 26. Hand and wrist smashed between railway buffers. Amputation (circular). Recovered. *Case* 28.—The Derbyshire General Infirmary: Mr. Johnson.—A woman, aged 38. Disease of the wrist-joint. Amputation (circular) above the wrist. Recovery. *Case* 29.—The Derbyshire General Infirmary: Mr. Johnson.—A man, aged 40. Left forearm smashed by machinery. Amputation through the upper third of the forearm. Recovery. *Case* 30.—The Nottingham General Hospital: Mr. Thomas Wright.—A healthy man, aged 31, admitted for a gun-shot wound of the right forearm. The charge had entered at the middle of the inner side of the forearm, and had passed out at the outer side of the wrist-joint, completely smashing the lower end of the radius, some portions being blown away. There was considerable hæmorrhage, apparently from the interosseous artery. The median nerve was divided, and the soft parts much injured. The arm was amputated the next day (anterior and posterior flaps). Recovered. *Case* 31.—The Sussex County Hospital: Mr. Lowdell.—A man, aged 40, in very bad health. Amputation through the forearm, for disease of the carpus and wrist-joint. Under treatment. The stump is nearly healed. The man is suffering from tuberculous disease of the lungs. *Case* 32.—The Leeds General Infirmary: Mr. Smith.—A mason, aged 32. Primary amputation (flap) in the upper third of the humerus for severe smash of the arm. In three weeks pyæmia accompanied by jaundice set in, and in seven days he died. *Case* 33.—The Leeds General Infirmary: Mr. Smith.—A boy, aged 17. Primary amputation (rectangular) through the upper third of the humerus, for smash of hand. Recovery with a good stump. *Case* 34.—The Leeds General Infirmary: Mr. Smith.—A man, aged 27. Primary amputation (rectangular) through the middle of the forearm, for smash of the hand and wrist. Rapid recovery. *Case* 35.—The Leeds General Infirmary: Mr. Smith.—A man, aged 58. Primary amputation (rectangular) through the upper third of the forearm, for severe smash of the wrist, etc. Recovery. *Case* 36.—The Leeds General Infirmary: Mr. Hey.—A woman, aged 27. Primary amputation (rectangular) immediately below the elbow, for machinery accident. A considerable portion of the flap was destroyed by phagedænic ulceration. The stump was, however, an excellent one. Recovery. *Case* 37.—The Leeds General Infirmary: Mr. Hey.—A man, aged 48, had had his hand chopped off immediately above the heads of the metacarpal bones. A partial amputation was performed, and was followed by such considerable sloughing of tendons, etc., as to necessitate amputation immediately below the elbow (rectangular), five weeks after the original injury. An excellent stump resulted. *Case* 38.—The Gloucester General Infirmary: Mr. Lovegrove.—A man, aged 44. Smash of hand by machinery. Amputation (circular) of the forearm, four weeks after injury. Recovery. *Case* 39.—The Derby Infirmary: Mr. Fearn.—A lad, aged 19. Forearm and elbow much smashed by a railway accident. Amputation in the middle of the arm. Some of the skin of the stump sloughed. Recovery. *Case* 40.—The Derby Infirmary: Mr. Fearn.—A man, aged 40. Smash of the hand, amputation above the wrist. Some of the muscles sloughed. Recovery. *Case* 41.—The Northampton Infirmary: Mr. Terry.—A man, aged 67. Malignant ulceration of the thumb gradually spreading towards the palm, which had become thickened and infiltrated. The disease had commenced spontaneously three years previous, at the end of the thumb, as a small, warty growth, which ulcerated. The sore steadily extended in spite of all remedies, involving the bones and soft parts *en masse*. There was little pain. No glandular enlargement existed, and the patient's health was remarkably good. Amputation at the wrist-joint March 2, 1859. He was discharged well, on April 13. He remained well in December 1859. *Case* 42.—The Hull Infirmary: Mr. Craven.—A stout, muscular, man, aged 47. Admitted for crash of the right arm. He was said to have lost a large quantity of blood. He had just recovered from a dislocation of the humerus on the same side. There was a wound on the outer and back part of the arm extending from the wrist to the elbow and exposing all the muscles, which were lacerated and contused. No pulsation could be felt in either the radial or ulnar arteries. The radius and ulna were entire, but both were dislocated backwards at the elbow-joint. Amputation (circular) through the middle of the upper arm. Recovery. *Case* 43.—The Hull Infirmary: Dr. King.—A boy, aged 13. Smash of the forearm up to the elbow-joint. Amputation (flap) just above the elbow-joint. Recovery. *Case* 44.—The York County Hospital: Mr. Husband.—A boy, aged 16. Amputation near the shoulder-joint for crushed arm by a thrashing machine. *Case* 45.—The York County Hospital: Mr. Keyworth.—A girl, aged 12. Amputation for strumous disease of the elbow-joint. Recovery. *Case* 46.—The Sussex County Hospital: Mr. Lowdell.—Smash of the forearm and middle and lower third of the arms by a railway accident. Amputation just below the shoulder-joint. Recovery. *Case* 47.—The Sussex County Hospital: Mr. Lowdell.—A man, aged 57. Disease of the bones of the fingers and hands, the result of phlegmonous inflammation a few months before. Amputation. Under treatment. *Case* 48.—The Sussex County Hospital: Mr. Blaker.—An unhealthy intemperate man, aged 55. His elbow-joint had been smashed by having been run over by a brewer's dray a few hours before. Amputation (circular) in the middle third of the arm. There was subsequently great sloughing of the skin of the flap, but this has now all stopped, and there still remains plenty of covering for the bone. He is progressing favourably. *Case* 49.—The Sussex County Hospital: Mr. Blaker.—A man, aged 30. His hand, forearm, and upper part of the arm were frightfully crushed by an enormous weight. The integuments of the shoulder were extensively bruised and swollen with effused blood. The arm was removed just below the shoulder-joint. The man fell into a state of collapse and died forty hours after. At the autopsy several ribs and the scapula on that side of the body were found fractured. *Case* 50.—The Nottingham Hospital: Mr. Clay.—A man, aged 31. Severe compound fracture of both bones of the forearm. An attempt was made to save the limb. A portion of the radius and ulna were removed. The wound was closed by iron wire sutures and isinglass plaister, after which two side splints were applied. His general health had always been good. Excessive suppuration followed, the bones being laid bare to a great extent, and as there seemed no hope of saving the limb, amputation—anterior and posterior flaps—was then resorted to. Recovered. *Case* 51.—Addenbrooke's Hospital (Cambridge): Mr. Lestourgeon.—A thin, but not unhealthy-looking woman, aged 70. "The whole of the metacarpal portion of the left hand is involved in a swelling which projects nearly equally on the palmar and dorsal surfaces, and measuring thirteen and a-half inches in circumference. The swelling is soft, fluctuating at some parts, at others it is firmer. The skin, though red, is natural in structure. The part is tender. The general appearance of the swelling, and its seat, is suggestive of an enchondromatous character, and the history confirms that view, and renders it probable that recently the mass has softened and undergone considerable increase of size. Seventeen years a swelling began on the back of the hand; it was hard and rather painful, but did not interfere with her working; it gradually increased, but in the last three months the increase of size had been rapid, and it has been more painful. No enlargement of glands at elbow or in axilla." On November 16, 1860, Mr. Lestourgeon amputated at the forearm by Teale's method. Recovered. *Case* 52.—Addenbrooke's Hospital (Cambridge): Dr. Humphry.—A healthy-looking old man, aged 60, admitted with disease of the wrist-joint, ensuing upon phlegmonous erysipelas which spread from the finger.

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He stated that he pricked the little finger of the right hand two months before admission, and that inflammation extended over the hand and forearm. Dr. Humphry, on May 25, 1860, amputated a little below the middle of the forearm, making semilunar flaps of skin. The carpal bones were all carious, some of them quite loose; the adjacent articular surfaces of the radius and ulna, and of all the metacarpal bones, were also carious, as well as the surfaces of the lower radio-ulnar joint. Recovered.

LIGATURE OF ARTERIES.

Case 1.—The Leeds General Infirmary: Mr. Teale.—A man, aged 40, accidentally stabbed himself with a clasp-knife at the lower part of the thigh on its inner side. Profuse arterial bleeding followed. Mr. Teale having enlarged the opening by one incision directed inwards through the mass of muscles, and another upwards in the direction of the femoral vessels, secured the ends of the divided artery, which proved to be a large muscular branch of the femoral. Delirium, great œdema of the whole limbs, and formation of several large abscesses in various parts of the leg followed. He ultimately recovered. *Case* 2.—The Derby Infirmary: Mr. Gisborne.—Injury to the hand and wrist by machinery. Gangrene eighteen days after the injury. Amputation of the forearm through the lower third. Secondary hæmorrhage on the ninth day. Ligature of the brachial by Mr. Dolman, House-Surgeon. Recovery. *Case* 3.—The Derby Infirmary: Mr. Johnson.—Ligature of the femoral for secondary hæmorrhage after amputation. Recovery (see Double Amputations, Case 2).

Fatal Case.

Case 4.—A man, aged 40, had a fluctuating swelling of the whole calf. When punctured, a firm coagulum of blood presented itself, and about eight hours afterwards free arterial hæmorrhage took place. A large incision having been made, and about two pounds of coagulated blood and fibrine turned out, an opening in the posterior tibial was found, and this vessel was secured above and below that point. Three days later free bleeding took place. The cavity was again cleared; but no source of hæmorrhage was detected. A large vessel, pulsating strongly, was tied high up in the cavity. In three days bleeding again occurred, when amputation above the knee was performed (see Amputations). The patient died. Owing to the sloughy condition of the parts no satisfactory solution was obtained on examination.

EXCISION OF JOINTS.

Elbow.—*Case* 1.—Addenbrooke's Hospital (Cambridge): Dr. Humphry.—H. C., aged 17. Disease of the joint of two years' standing. Excision. Recovery.

Knee.—*Case* 2.—West Norfolk and Lynn Hospital: Mr. Marsters Kendall.—A boy, aged 12. Two or three years ago he had been an inmate of the Hospital for disease of the joint, and then forcible extension was had recourse to. On admission the knee was much enlarged and very painful. Excision August 15, 1859; made an out-patient December 24. Under treatment. *Case* 3.—The Derbyshire General Infirmary: Mr. Fearn.—A woman, aged 23. Scrofulous disease of the right knee-joint. Excision. Profuse suppuration. Three months after the operation hæmorrhage came on. She refused having anything done. Death. *Case* 4.—The Derbyshire General Infirmary: Mr. Fearn.—A girl, aged 6. Strumous disease of the left knee-joint. Resection. Partial anchylosis. Under treatment. *Case* 5.—Addenbrooke's Hospital (Cambridge): Dr. Humphry.—A thin, but not unhealthy, man, aged 40, was admitted with synovial disease (granular) of right knee of about two years' duration. The joint was excised by Dr. Humphry, May 18, 1860, in the usual manner reflecting the patella with a semilunar flap cut from below, and leaving that bone in the flap. He went on quite well for four days. On the evening of the fourth day he did not look quite so well. In the night of the 22nd he was attacked with violent pain in the belly, with vomiting and purging and great prostration. On the 23rd he was much altered; the diarrhœa had ceased. On the 24th the wound looked rather sloughy, and the knee and thigh were swollen. The next day he appeared better; the appearance of the wound and the character of the discharge improved; but after this time he gradually got worse, had more pain in the knee, and was tormented with starting in the limb; and, on the 29th, amputation by Teale's method was performed by Dr. Humphry in the middle of the thigh. The operation made but little difference in his condition. The stump sloughed, and he died on June 2.

Shoulder.—*Case* 6.—The Leeds Infirmary: Mr. Teale.—A man, aged 20. Disease of the joint six years. There were several discharging sinuses leading to bare bone. A large rectangular flap having been raised from the outer side of the shoulder, and the head of the humerus, which was found to be carious, was removed and the glenoid cavity gouged. The flaps united well, and very considerable range of motion was obtained. *Case* 7.—Addenbrooke's Hospital (Cambridge): Dr. Humphry.—A strumous-looking girl, aged 18, was admitted with disease of right shoulder (ulceration of cartilages). Nine years ago she had a fall and hurt her shoulder; never quite recovered. It became worse a month before Christmas last, since which time she has suffered a good deal of pain, and has been under treatment. Dr. Humphry, June 1, 1860, excised the joint, making a semilunar incision through the deltoid, commenced beneath the fore part of acromion, and continued outwards and downwards. The head of the humerus was extensively and deeply ulcerated, so that it was necessary to remove an additional slice after cutting it off to a level with the attachment of the capsule. The glenoid cavity was also ulcerated, and the ulceration had extended deeply into it at one part. This was removed by the saw and cutting-pliers, so that an entirely healthy surface of bone was left both in the scapula and on the humerus. There was not much bleeding. The wound was closed by a few sutures. An abscess extending down the arm was opened in the course of the operation. Recovered.

Ankle.—*Case* 8.—Addenbrooke's Hospital (Cambridge): Dr. Humphry.—A healthy lad, aged 12, was admitted with extensive disease of the right ankle, which appeared to have arisen spontaneously about six weeks previous to admission, and must have been very acute. Amputation was recommended, but the parents objected, but consented to resection. Dr. Humphry (June 21, 1860) made the usual semilunar incision beneath the outer ankle, and found it necessary to remove the whole of the astragalus, the navicular bone, and the ends of the tibia and fibula. Suppuration took place very freely, and the wound healed in considerable part of its extent, but there was no union of the bony parts; the foot hung loosely by the skin to the leg. His health failed so, permission having been at length obtained, the limb was removed August 12, 1860, just below the knee by circular incision. Recovery. *Case* 9.—Addenbrooke's Hospital (Cambridge): Dr. Humphry.—A sickly little girl, aged 6, was admitted for disease of the ankle of long standing. The parents refused to allow the limb to be amputated. The joint, including the whole of the astralagus was removed. The result of the operation was not satisfactory, and the parents took the child out of the Hospital.

Hip.—*Case* 10.—A boy, aged 8. Acute inflammation of the hip-joint had followed a fall eight months before. When admitted he had open sinuses in front and behind; he was also much emaciated, and there was dulness under each clavicle. The head of the femur and the great trochanter were removed, and the carious parts of the acetabulum were gouged away. He progressed favourably for a month, when the discharge began to increase, and hectic came on. He died three months after the operation. At the *autopsy* it was found that a considerable portion of the shaft of the femur had necrosed since the operation. The acetabulum also was softened. The disease had not extended into the pelvis. The lungs were stuffed with tubercle. There were cavities in both apices.

An Ingenious Proposal for the Continuous Supply of Vaccine Lymph.—The Health Officer of Brooklyn, New York, proposes the following admirable solution of all our difficulties in keeping up the supply of the vaccine virus:—"In order to release the minds of parents from any anxiety in relation to the quality of the matter to be used on such occasions, and also to meet the wants of the Medical Profession in this city, I would recommend that a *cow be set apart*, and kept at the grounds of the Almshouse for this especial purpose, from which fresh matter *could always be obtained*."

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Medical Times and Gazette.

SATURDAY, APRIL 27.

SEWER AIR IN HOUSES.

THERE is a striking difference of opinion at present as to the origin of certain diseases, of which diphtheria is one. Some eminent Physicians have been led by their investigations to believe that what are commonly called "sanitary" or "hygienic" conditions have really no influence either on the origin, development, or spread of this disease. Others, on the contrary, believe that it not only flourishes, and tends to spread most virulently under conditions the reverse of sanitary, but that some of these conditions actually give rise to the disease *de novo*.

This is a question which concerns not diphtheria alone, although we have selected that disease by way of illustration; but it extends to erysipelas, pyæmia, scarlet fever, typhus, and the whole range of "zymotic" diseases. No one now denies that they spread by "infection,"—*i.e.*, by virtue of the emanations from persons who are affected with them. The only question is, whether they ever arise without antecedent infection; and, if so, whether "sanitary conditions" have aught to do with their origin; for few persons will deny that these conditions affect their intensity and power of spreading.

By "sanitary conditions," we suppose, are meant the supply of sunlight and wind; the means of distributing fresh air and wafting away the exhalations of skin and lungs from inhabited rooms; the state of cleanliness, or the reverse, of the surface of walls, ceilings, and floors; the condition of carpets, curtains, and bedding; the condition of the wearing apparel and of the skin of the inhabitants of any house; and lastly, the removal or otherwise of the matters excreted by the bowels and kidneys of the occupants. We suppose there is no *à priori* reason for doubting that the constant inhalation of excrementitious effluvia, whether recent, or subjected to partial decomposition in the sewers, must have some effects, although we may still be uncertain whether the production of diphtheria be one of them. But, at any rate, before we decide that diphtheria may *not* be a consequence of sewer air, it will be as well to study the condition of houses as they actually exist and the channels by which sewer air may have access to them; for we are sure that many a house, especially of the "better classes," (who are said to suffer most severely from diphtheria,) is pronounced to be "free from sanitary defects" through sheer want of knowledge of the multiform modes by which "house air" may be mixed with "sewer air." Let us now, then, suppose that a man is taking a house, and consider what inquiries he should make if he wish to protect himself from sewer poisoning.

The first inquiry should be, *when* was the drainage constructed or altered? because the date will give a very perfect idea of the nature of it. A house which has been built for thirty or forty years, and has not been disturbed during that period, is certain to have in or near it a cesspool, perhaps nothing else. If anything else, there will be a brick drain, flat bottomed, and laid nearly level, conducting the overflow of the cesspool to the nearest sewer. Both this brick drain and the sewer, be it observed, were never adapted for their present purpose, but were originally designed for rain-water channels. If unusual care has been taken, this drain may be in good condition, and may be furnished with some sort of apparatus to hinder the reflux of vapour from the sewer. But in many old houses the drain was originally covered with wood which has long since decayed and fallen in, rats have entered and undermined the brickwork. In some instances, a close grating was originally put at the mouth of the drain to hinder rats from entering, and this has effectually acted as an obstruction to the entire drain, so that nothing but liquid has oozed away into the ground, while all the solid filth of thirty or forty years has remained festering in the cesspool and the overflow drain.

We write with documents before us describing this as the actual condition of house after house in the better parts of the West-end of London—not the houses inhabited by the poor, because they have now, for the most part, been newly drained under the care of the newly-appointed Inspectors of Nuisances—but houses inhabited by Physicians, Church dignitaries, and Members of Parliament. Whoever, then, takes an old house had better calculate on spending from £25 to £50 for new pipe drainage; and the sooner it is done the better.

Brick drains of any sort are imperfect, because, from the well-known porosity of brick, they offer no obstacle to the diffusion of gases; yet there are few houses built or rebuilt up to ten years ago, which have anything better. After that time, glazed pipes, which had met with every opposition from builders as long as they could oppose them, were forced into general use by the common-sense of the public, and are found in most houses built of late. But pipes are as bad as brick drains unless their joints are well stopped by cement; and then, supposing the pipes to be impervious, to be well cemented, and laid at a proper level, and perfect in themselves, it is evident that some further precautions are necessary, because they lead into an enormous underground network of sewers, generating noxious gases in abundance, which these pipes will be the means of bringing back into the house, unless proper means be taken to prevent it.

Dr. J. B. Sanderson has investigated the causes of the entry of air from the sewers into houses, and put the matter upon a fair scientific footing. He has constructed an instrument (we will not wait to describe it now, as we propose to give an engraving of it next week) by which the minutest variations of the barometric pressure of the atmosphere—even so little as $\frac{1}{1000}$th of an inch—can be accurately measured, and by which the difference of pressure in any two places may be readily seen. By this instrument he has ascertained that the pressure of the atmosphere inside houses is always less than in the open air; and in a degree depending on the activity of the ventilation. The pressure in the sewers is also less than in the open air, *but greater than in the houses;* hence it is certain, *à priori*, and Dr. Sanderson has demonstrated it by experiment as well, that if house drains are not perfectly air-tight, and if they have an open communication with the main sewer, a current of air will set in from the sewer into the house during at least nine months of the year. Or, to put it in other words, when the doors and windows are tightly shut, and the atmosphere within the apartments is rarified by fires, that suction-force which makes the wind whistle through the key-holes, and which draws "return smoke" down the chimneys of unoccupied rooms, will silently draw up the gases from the sewer below, through the porous bricks, or any other crevices through which gases can pass. We are informed that the draught of a kitchen fire has been known to overcome the resistance offered by a common *trap* of an ordinary sink. It is on this principle that stinking houses always stink most "when there is a party," and when the fires are larger and more numerous, and the temperature of the house greatly raised.

Now, to hinder the entry of sewer vapour, the orifice of the house drain where it enters the sewer should be protected by a *trap*. Some of these contrivances consist of a metal flap or valve, capable of opening to let liquid run out, and closing the orifice tightly against any reflux. The worst of these is that the flap is easily deranged, and permits the entrance of air, although it is useful enough in low-lying neighbourhoods

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in preventing the regurgitation of water from the sewer during storm-floods. Other forms of trap consist in some contrivance for retaining a certain depth of water, the pressure of which is greater than that of the sewer air. A portion of the pipe bent downwards into a syphon, so as always to hold some water, is the best thing of the kind.

Thus the sewer air may be prevented from entering the house drain. But it is found in practice that a certain quantity of offensive gas is generated in the house drains themselves; that this has a tendency to enter the house; and, in fact, that, as every orifice is trapped, and the outlet likewise trapped, so as to convert the house drain into a closed passage, so, every time any water is poured down, an equal volume of drain gas must be displaced; and will escape either by the orifice through which fluid is entering, or by forcing its way out of some of the other traps. For instance, suppose a bucket of water to be poured down the sink in the nursery, it will displace its own volume of air in the drain, which will probably escape by lifting the bell-trap in the scullery. In order to provide against this source of vitiated air, and to keep the house drains constantly flushed with cold air, as they are likewise with water, Mr. James Lovegrove, Surveyor to the parish of Hackney, has invented a very perfect trap, provided with air-valves, which we have great pleasure in mentioning as one of the good results of the application of ingenuity to the prevention of the causes of sickness. Mr. Lovegrove's trap consists of a syphon, of one air-valve opening from the house drain into the sewer, and of another air-valve opening inwards, for admitting fresh air into the house drain from the back of the house. We must refer to the cuts in another page for fuller explanation; suffice it here to say, that, by Mr. Lovegrove's contrivance, when water is poured into a house drain, the displaced air is driven into the sewer, and its place supplied by fresh air from the air-supply valve at the back of the house. Moreover, forasmuch as the atmospheric pressure in the sewer is less than that of the outer air, these valves provide for a current of cold air passing along through the house drain into the sewer, and so render the accumulation of foul air in the house drains impossible.

A consideration of the ingenuity expended by Mr. Lovegrove and others in perfecting these details, may serve to show that the difficulty of providing absolutely against the entry of sewer air is considerable; and that it may be rash to assert that sewer air has had no share in the production of any given disease in any ordinary house. But, even supposing all the apparatus we have described to be in the most perfect order, there are a dozen other methods, at the least, by which a house may be poisoned, and which any man who is taking or repairing one, ought to guard against. For example:—Rats may enter from the street sewer, alongside the pipe-drain, and work their way, making a tunnel through the soft, displaced earth, right up to the kitchen-fire, and so bring sewer air direct into the house. Or they may travel into your house from the damaged drains of your neighbours, right, left, or back; or, along the area and through your front wall. Your own pipe-drain may be perfect, but an old pre-existing brick-drain may still remain not broken up; or one of your three neighbours may have an ancient drain running through your premises, or even a cesspoool of which you have no knowledge. Cracks in the walls and the tracks of mice may bring currents of foul air upwards, and deliver them in your boudoir or bedroom.

Every sink within the house must be carefully trapped, and every external pipe; for every water-pipe leads into some sewer, and where water can flow down sewer gases can come up. We read of a rainwater-pipe bringing up sewer fumes to the outside of a drawing-room window. There is another case, too, in which a whole family had been ill in one of the principal streets at the West-end of London, and the house at times unbearable from effluvia, which entered the upper windows. Enormous expense had been incurred, and everything which builders could suggest had been done. At last it was discovered that the waste-pipe (*i. e.* that which lets surplus water run off) hidden within a cistern, which was supported on a bracket outside the *next* house, led down to an old, rotten, untrapped drain in that house, and that this was the source of all the illness, and expense, and misery. We spoke, too, in a late Number, of the number of unknown and forgotten sewers which exist in and about London, insomuch that such a sewer may run under a house, some one rainwater-pipe may lead into it, and thus, though the general drainage may be perfect, this one unsuspected channel may poison a whole house.

When to all these sources of sewer air, we add the ventilating openings in the streets, which in certain states of wind may discharge the vapour of miles of sewer, right upwards from the Thames, in front of some particular house, and when we think of the abominable neglect which prevails in the sewage arrangement of country houses and villages, we need only say, in conclusion, that we are not always able to decide upon "sanitary conditions," and especially upon the absence of sewer air, with such precision as some persons may imagine; and that it is premature to judge by the respectability of a street, the wealth of the inhabitants, and the amount of general cleanliness, that "sanitary conditions" must be perfect, without knowing about those underground sources of disease, which patients must continue to die of so long as Physicians will be too polite to investigate for themselves.

THE WEEK.

A Circular has just been issued from the War Office, altering the sixteenth clause of the Magna Charta of the Army Medical Department—the Army Medical Warrant of 1858. By that clause the relative rank of major is assigned to staff and regimental Surgeons according to the date of their commissions. But it is now ruled that staff or regimental Assistant-Surgeons who may hereafter be promoted to be staff or regimental Surgeons shall rank as major, *but junior of that rank*. We are glad to hear that a most energetic and influential protest has been entered against this first tampering with a Warrant which was obtained by Royal Commissioners, who, as they state, "endeavoured to place the Medical Officer in the position to which the dignity of his Profession and the great services he renders justly entitle him, and to ensure to his advice and opinion that weight and influence in the administration of the Army, which are necessary to secure the health and to maintain the efficiency of the troops." The Warrant so far has worked well. It has attracted to the Medical Service of the Army men of high Professional attainments—men who have joined the Service on the faith that the conditions of the Warrant should be maintained inviolate. These men will fear that if one of the terms be so soon infringed, others will soon prove equally untrustworthy, and then will recur the old difficulty of finding Medical Officers to whom the health of the Army can be safely entrusted. Naval Medical Officers will also watch with a very anxious eye an example which the Admiralty will only be too glad to follow. Again and again we see the absolute necessity for more Medical men in Parliament.

The Association of Medical Officers of Health are pleading for a clause, which they desire to insert in the Metropolis Local Management Amendment Bill now before Parliament, a clause compelling owners of houses in suburban districts to

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supply their houses with good and wholesome water, if it can be done at any reasonable cost, even although they are not within the reach of the mains of any water Company. The Medical Officer of Health for Fulham states, that there are large areas in his district where it is impossible to get water from any Water Company, and that many houses exist there without any supply of water. He further states, that in most instances a good supply might be obtained from wells at a very moderate cost. The same state of things exists also in other districts. There is a clause in the proposed Amendment Act to compel owners to supply their houses with water, where this can be done at a rate not exceeding 3d. per week by a Water Company. The Association of Medical Officers of Health suggest that the clause should stand thus:—

"If it shall appear to any Vestry or District Board that any house within their respective parishes or districts is without a sufficient supply of good and wholesome water, or if supplied with water, is without proper arrangements for keeping the same clean and wholesome, and that such supply can be furnished to such house by a Water Company at a rate not exceeding 3d. per week, or if not by any means at a reasonable cost, the said Vestry or District Board may give notice in writing to the owner or occupier of such house, requiring him, within a time specified therein, to obtain such supply, and make proper arrangements for keeping the water supplied clean and wholesome, and to do all such works as may be necessary for either or both of these purposes; and if such notice be not complied with," etc. etc.

A remarkable fact this in the nineteenth century!

A public meeting was held on Tuesday on behalf of the "Ladies' Sanitary Association." This is an Association which acts, for the most part, under sound Professional guidance, and which labours to diffuse a love of cleanliness and comfort, and a knowledge of the laws of health and life amongst the poorer part of the population. Tracts, edited by a Professional Committee, are widely circulated, and lectures have been delivered to the labouring classes by Drs. Dundas Thomson, Sieveking, Richardson, Lankester, Druitt, and others. If the Society keep within their own sphere of action, as they seem inclined to do, so that Members of our Profession can heartily co-operate with them, they may have a very wide career of usefulness.

It is really surprising how much offence may be given quite unintentionally by a kind-hearted soft-headed man when he talks of people he knows little or nothing about. It would be difficult to find a more singular instance of this good-natured, ignorant blundering than in Lord Ebury's speech at the Freemasons' Tavern, on Monday, when moving the first resolution promoting the establishment of a benevolent lunatic asylum, where the insane of the middle classes, who are now virtually excluded from private asylums by want of means, might be received on such terms as their relatives could afford, and yet derive all the benefits of the ablest Medical treatment. Not content with following the example of Lord Shaftesbury, and pointing out the great need of such an institution as they, with Dr. Conolly and many other benevolent persons, have long been anxious to establish, Lord Ebury floundered on almost unconsciously into the grossest possible insult which could be offered to a body of honourable men. He said:—

"Private asylums were entirely founded with a view to the profit or loss of the principals, and when the duty of cure was on one side, and the inclination of profit on the other, it was not difficult to judge by the universal rule of human nature to which side the balance would incline."

Now, even admitting for a moment Lord Ebury's infinitesimal view of the motives of human action—granting that mere money-making is the "universal rule of human nature"—it surely requires very little more than an infinitesimal amount of reason to convince the most stupid of men that any Doctor who acted on Lord Ebury's "universal rule" would soon be left without patients. A man who cured nobody would very soon have nobody to cure; a man who fleeced every patient who came to him would soon be avoided by everybody. In our Profession, as in every other, all men learn that "honesty is the best policy," and if Lord Ebury cannot conceive that a man who is "only a Doctor" is actuated by the same honourable motives and the same kind feeling which lead him forward in so many works of charity, pray let him take a globule of common sense, and learn that gentlemen who devote their lives to the care of the insane are not quite such idiotic shortsighted money-grubbers as he supposes.

Four deaths from diphtheria are reported to have taken place last month in the Children's Hospital, Great Ormond-street. One was the case of an infant, aged twenty months, who had been six weeks in the Hospital under treatment for spina bifida. Here, then, is a fair case for inquiry. Was diphtheria generated in the Hospital? If not generated, but brought there, are the arrangements for ventilation and cleanliness such as they ought to be? If they are, diphtheria ought not to spread. If it be alleged, on the other hand, that diphtheria will spread in spite of "sanitary precautions," that disease ought clearly to be excluded from a Children's Hospital.

The indefatigable Dr. Livingstone has sent home despatches from Central Africa, dated November 26th, which were read at the Geographical Society on Monday. His account of the culinary properties of the hippopotamus are fascinating:—

"The hippopotami had eaten all my trees, so henceforth we shall have war with them to the knife. They are good food, half beef and half pork, and lots of fat, that serves as butter. This is part of the '*casus belli*.' By the way, our good friend, Professor Owen, and the gastronomic committee will stand very much in their own light if the she-giraffes die a natural death. If they praised the eland so, which we consider but so-so, a dinner off she-giraffe will leave them all lying on their backs.

"We were saddened by the loss of a party of London missionaries, as we suppose, by fever, at Linyanti; six out of nine Europeans perished in three months. By a remedy first tried on my own children at Lake Ngami, in 1850, we, at a lower and more unhealthy part of the Zambesi, cured severe cases of the complaint in Europeans so quickly that our march was rarely interrupted more than a day or two; a man stricken prostrate was sometimes able to resume his march on foot a day after the operation of the remedy, and this while those good people were helplessly perishing. The proper medicines, too, for its composition were found by me in the wagon, which has been carefully guarded for seven years, within a few hundred yards of their graves. I think it is mentioned near the end of the 'Missionary Travels' which you made me write; but I am now anxious that it become generally known, and there is great difficulty in the matter. Medicines so often deceive people; panaceas in one hand and nonentities in another. I have, however, never failed to cure during ten years."

Dr. Septimus Gibbon, Medical Officer of Health for the Holborn District, seems to be at no loss for cases illustrating the presence of sewer air in houses, and its connexion with zymotic disease. The details are decidedly not nice; neither would the state of things be detailed to any Physician who might be consulted supposing a case of diphtheria should occur.

"A complaint has been received respecting a cesspool at a public-house in St. John-street, Smithfield. Some six or eight weeks ago, when a death from erysipelas occurred in this house, a notice to empty and fill up this cesspool and to

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construct a new pipe drain was issued, but was not pressed because the late tenant assured us that the whole house was to be pulled down and rebuilt immediately. It has been, however, merely repaired. As an instance of the defective state of the house drainage in the older portions of this city, I may mention that last week in this house, as the barmaid was walking across the cellar, the ground gave way under her, and her feet went ankle deep into what she declared to be the soil of a cesspool. On examination it proved to be a very old brick drain, having a sewage deposit in it to the extent of about six or seven inches in depth. The cellar is without ventilation of any kind."

Of the 106,000 persons vaccinated last year in Ireland, not 30,000 belonged to the 145,000 births amongst the poor in that year. So says the Report of the Poor-law Commissioners for Ireland for the last year. Compulsory vaccination is the remedy proposed by some; but an extension of general education, and greater regard for life, must be made somehow to accompany it.

We are informed that the case of the Society of Apothecaries and the Royal College of Physicians of London, will be heard on Tuesday next, the 30th inst., before Sir W. P. Wood, in one of the Vice-Chancellors' Courts, Lincoln's-inn.

ROYAL COLLEGE OF PHYSICIANS.

The following were the Questions used in the Examination for the College Licence last week:—

First Examination.

CHEMISTRY, MATERIA MEDICA, AND PRACTICAL PHARMACY.

1. How would you proceed in order to determine the presence of albumen in the urine? State the sources of fallacy connected with each test.
2. Name the principal officinal caustics; explain their chemical action in each case; and give examples of the morbid conditions to which they are respectively adapted.
3. Describe the officinal iodides. State how they are prepared; and mention the impurities which they are liable to contain.
4. Describe the preparations of colchicum. What are the relative strengths of acetum colchici and vinum colchici, supposing the whole of the active principles to be taken up?
5. Enumerate the officinal substances which increase and which diminish the action of the bowels; classifying the former both according to their power and their mode of action.

Second Examination.

MIDWIFERY AND THE DISEASES OF WOMEN.

1. Describe the course of the head through the pelvis, in a case of face presentation.
2. Describe the various conditions upon which protracted labour depends, and point out the remedies suitable to each.
3. What are the different indications for the induction of premature labour? What are the different modes of inducing it, and the comparative advantages and disadvantages of each?
4. Describe the principal remedies employed in restraining uterine hæmorrhage; explain their modes of operation, and point out the particular circumstances under which each should be employed.
5. What is the retroversion of the uterus? By what circumstance is it produced? and how is it treated?
6. Enumerate the different varieties of uterine polypus, and describe the seat and structure of each, with the symptoms to which they give rise.

First Examination.

ANATOMY AND PHYSIOLOGY.

1. Describe the medulla oblongata of man. Mention the nerves which take their origin from it, and their presumable functions.
2. Describe the structure of the larger and smaller arteries; and explain how their structure is adapted to their function. What is the true meaning of "arterial action?"
3. Describe the coats of the stomach; their general arrangement and minute structure. What are the characters of the gastric secretion; and what is its probable amount daily?
4. Describe the mechanism of respiration; and the changes it impresses on the air inspired.
5. Define, with reference to the surface of the body, the situation of the heart, aorta, liver, stomach, and spleen.
6. What is the function of the liver?

Second Examination.

PRINCIPLES AND PRACTICE OF MEDICINE.

1. What are the anatomical characters and symptoms of cirrhosis of the liver? How is its diagnosis to be made?
2. Describe the physical signs and local effects of a sacculated aneurism of the arch of the aorta.
3. Describe the general phenomena of hæmatemesis; its various causes; and give the characters which distinguish it from hæmoptysis.
4. Give the distinguishing characters of scarlet fever, diphtheria, and croup; and describe the treatment of those diseases respectively.
5. Describe the treatment of pneumonia.
6. State the various remedies recommended for the treatment of acute rheumatism and gout; and the doses of each.

REVIEWS.

Ten Lectures Introductory to the Study of Fever. By ANDREW ANDERSON, M.D., Lecturer on the Practice of Medicine in Anderson's University, Glasgow. 8vo. Pp. 180. London: 1861.

SINGULAR as it may appear, there are some books the "preface" to which is to be found at the end. In his last lecture Dr. Anderson thus addresses his class:—"You want in the first place to get a good notion of fevers as a whole, a broad idea of their general relations to one another. A few days ago, a senior friend in the Profession asked me upon what I was lecturing, and on my reply, remarked that students did not care about fever—they did not take an interest in it. I thought, so much the worse for them and for their future patients; whatever may be the case now, they will in the course of their practice certainly have to care for fever. But, perhaps, one reason why students do not care so much about fever as about other diseases is because of the complicated way in which it is sometimes treated, and of the difficulties which I have been endeavouring, with what success I know not, to show you are more apparent than real. I have aimed at simplicity and clearness of arrangement alone.—(P. 176.) If Dr. Anderson's lectures as they appear in the volume before us did not interest his class, if his pupils failed to carry away with them clear and, above all, practical notions of the varieties of these specific maladies, and of the general line of treatment appropriate to each, we can only say that those gentlemen must have been excessively inattentive or unusually obtuse. We think Dr. Anderson has just hit the student's difficulty; it remains for us to show how.

The first three Lectures are devoted to such general topics as relate to all specific fevers, by which the author clears his ground, marks out its boundaries and indicates the broad features of the instruction he designs to furnish; and this is for a student the best part of the book, certainly the most important. It is here that Dr. Anderson treats of the causes, essential nature, types, forms, complications, and sequelæ of specific fevers as a class of diseases, and it is here that he lays down for the guidance of his pupils such a summary of practical rules for management as may, by the exercise of proper discrimination and judgment, be applied to any case that in future may be submitted to their treatment. He starts by impressing upon his class that "as far as the natural history of the complaint goes, it is with the poison that we have to do; as far as we are concerned with the disease as practical

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Physicians, our business is with the effect produced—with the course and currency of the symptoms."—(P. 3.)

Among the causes of fevers he distinguishes "malaria" "effluvia," (produced by the decomposition of animal matter,) "contagions," pointing out that the poisons thus communicable appear "to be most energetic during the period of convalescence. At the time I was Clerk in the Fever Hospital here, we often got into the acute typhus wards cases of various other diseases; it was our invariable rule, based upon experience, to send these patients home directly from the acute wards, because we found they might continue there without much chance of catching the fever, which they were sure to take if sent to the convalescent wards."—(P. 8.)

"What is the essence of fever?" Dr. Anderson replies by pointing out the three derangements—that of the blood, of the nervous system, and of the assimilative processes, and along with this triple derangement a triple series of phenomena.—"Depression followed by a stage of reaction, and that by a stage of subsidence. The three derangements may be of various degrees of *intensity*, and the three successive phenomena may be of various degrees of *activity* and of *duration*."—(P. 13.)

And then as to types. "Still speaking of fever, irrespective of any particular poison. We divide it thus into eight different types; in other words, eight distinct phases which fever may assume. First, the mild, where all goes smoothly, and little treatment is required—a type of fever with which it is very easy to deal; secondly, the toxic, in which the patient dies poisoned, rapidly, as if by aconite or arsenic. We have six types besides; and these six types consist of exaggerations of the six phenomena which I have already mentioned as the component parts of essential fever. If the stage of depression be in excess, the fever is said to put on the congestive type; if the stage of reaction be in excess, it bears the name of inflammatory; if the stage of subsidence be excessive, the fever is then of the asthenic type. Again, if the derangement of the nervous system be especially prominent, we call it a nervous fever; if the derangement of the blood be excessive, it is a fever of the septic type; lastly, if the derangement of the general assimilation be very marked, we call it a fever of the typhoid type."—(P. 19.)

And so our Author goes on, showing what remedial measures are to be adopted to combat the tendency represented by each of these types of disease. He prefers, we think justly, the alcoholic over other stimulants in the asthenic type, but points out the importance of not leaving it in the hands of a nurse to alter the dose according to her discretion. "If you expect any change in your patients," he tells his pupils, "only go back all the sooner, and you will save yourselves a great deal of vexation in these cases"—(P. 27.)

We should like to quote the whole of Dr. Anderson's remarks upon the management of a case of fever, so excellent are they. It would be well if all who had to treat fever cases could and would insist on their patient being "established in the best part of the house." How often is the opposite practice adopted,—the convenience of the attendants being the first thing considered; the well-being of the patient the last.

But we must hasten on to the lectures on the special fevers. Of the Author's classification we need say nothing. He admits that it is not a very hopeful task to arrange fevers; but, as he says, "some order must be taken," and, perhaps, his order is as useful as any. We shall content ourselves with jotting down some notes of his observations here and there as we have marked passages in the remainder of the volume.

Dr. Anderson thinks the best mode of preventing pitting in small-pox is to touch each papule as soon as it appears with a pointed stick of nitrate of silver, and immediately after to cover the whole face with pieces of lint soaked in oil. We confess to having no faith in any process whatever.

It is matter of common remark that mild cases of scarlatina are those most frequently followed by dropsy, etc. Dr. Anderson is "not sure of this—perhaps it may be so; the reason, however, in all probability being that less care is subsequently taken of the mild than of the severe cases." He very properly calls attention to the influence of family constitution as modifying the form of this disease. "But there is a condition in which the disease is almost invariably fatal, that is the puerperal state. No precaution, then, ought to be neglected—no precaution ought to be thought excessive—which tends to prevent a woman from receiving the poison of scarlatina while pregnant or recently delivered. If she be pregnant when she takes the fever, she will almost certainly abort, and die after the abortion. If she be recently delivered, the disease will be of the most malignant type, and almost always fatal."—(P. 79.)

The following is the mode in which the author discusses the nature of those cases which appear to indicate the identity of typhus with enteric fever. He first narrates a fatal case of the kind where there was a very copious and livid typhoid eruption, and after death the solitary glands of the duodenum were found softened and ulcerated, and Peyer's patches everywhere enlarged, a patch on the lower part of the ileum being about five inches long with an excavated ulcer in its vicinity; and then compares with it two other cases, one of small-pox and one of scarlatina, where similar appearances were presented after death. "Now, can we suppose it possible that small-pox, scarlatina, and typhus are *all* identical with enteric fever, because these cases prove that the special lesions of that disease may co-exist with each of them? Thus, by a *reductio ad absurdum*, the position falls."—(P. 115.) Why, he asks, should we hesitate to admit that typhus and enteric fever may occur combined any more than we should the co-existence of scarlatina and measles?

The Eighth Lecture commences with "Gastric Fever," which Dr. Anderson holds to be distinct from "enteric fever" and from typhus. He believes that more than most specific fevers it is connected with emanations from decomposing animal matters, that it often is more or less remittent, and that it is constantly connected with an inflamed or irritated state of the mucous membrane of the stomach and bowels. "Its eruption is the most obscure of the three which belong to the imperfect exanthemata (typhus, enteric and gastric), and also the most inconstant. It does not appear, like that of typhus, over the whole body; but like the spots in enteric fever, only on the epigastrium and abdomen; yet, unlike these, it is not elevated nor pink. It consists in a few small, insignificant-looking, red spots, which you would probably not observe unless you looked for them, and which appear about the seventh day of the disease."—(P. 120.) "The morbid anatomy, too, of the disease is quite distinct from that of enteric fever. There may be ulceration, but the ulceration is not from follicular disease; the mucous membrane is vascular, often soft, pulpy, ulcerated in various places; but its follicles are by no means specially affected."—(P. 122.) Dr. Anderson regards the "infantile remittent fever" as a mild form of this affection.

While lecturing on the treatment of the ophthalmia which may occur as a sequela of relapsing fever, Dr. Anderson takes the opportunity of expounding his views upon the value of bleeding and mercury in the treatment of inflammation in general. At the risk of lengthening out our notice of his book, we must quote some of these remarks, not because we agree with him, but because they show that thinking and observant men are still to be found who linger about the ancient paths. He writes:—"Venesection is not useful in those cases alone where we have plethora or vascular over-action, but also in some, at least, where very opposite conditions exist; and in which the (by me) undoubted practical fact of its beneficial efficacy may be accounted for by supposing that the removal of a certain quantity of depraved and morbid blood gives not only a relief to the local 'hyperæmia,' but also a stimulus to a more vigorous assimilation, and a consequent improvement of the vital fluid, which is the best foundation for remedying the local ailment."—(P. 136.) "The dogma that mercury is of no avail in the treatment of inflammation is, in my opinion, a dogma as pernicious as it is unfounded. Do not, I beseech you, be seduced into believing that inflammation ought to be left to Nature's curing, or that bleeding and mercury are worse than useless in treating them. Neither bleeding nor mercury is useful in *all* inflammations, nor in any inflammation at every stage; but the notion that they are *never* beneficial took its origin with those who are more disposed to theory than conversant with practice."—(P. 137.) The only unfair and uncharitable remark in the volume.

The two last lectures embrace the subjects of ague and other malarious fevers, puerperal fever, erysipelas, diphtheria, and influenza. We should be glad to see this book in the hands of every student of Medicine.

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PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

EXCERPTA MINORA.

Use of Glycerine in the Internal Employment of Chloroform.—M. Bonnet, a Pharmacien to one of the Paris Hospitals, gives an account of the various means he has tried of remedying the inconveniences which attend the ordinary mode of prescribing chloroform for internal use: seeing that, in consequence of its insolubility in ordinary vehicles, it is administered equably only with difficulty. He finds that mixing equal parts of chloroform and the finest glycerine in a mortar, until the droplets of chloroform cease to be visible, completely answers the end. When water or other adjuvant is added, a limpid fluid is produced, which exhibits no sign of separation, even when more than 100 parts by weight of the chloroform are added to distilled water. It is essential for this that the glycerine shall be perfectly pure. Sulphuric ether may be administered in the same way. For external application chloroform should be combined in the same way, a larger proportion being caused to be taken up by more rubbing. This preparation of the chloroform prevents the painful irritation which sometimes ensues on its application.—*Journal de Pharmacie*, March, p. 227.

False Cicatrices.—Dr. Credé has shown (a) that the white streaks or lines observed in pregnant women may be found in various diseases, during which a rapid and considerable distension has been produced, and that quite independently of pregnancy. Grenser had already stated the same thing in Schmidt's Cyclopædia; Virchow calls these streaks "false cicatrices," and says that they are especially met with after ascites, when this has been complicated with œdema of the parietes of the abdomen. Dr. Plagge, in the present communication, calls attention to the fact that these same false cicatrices are also met with after typhus, during the course of which there has been no distension of the abdominal parietes, and that in this they are due to atrophy of the cutis, as a consequence of defective nutrition, being accompanied by great emaciation, and having been preceded by no infiltration, by red striping of the skin, or by any abnormal coloration of that organ.—*Zeitschrift für die Staatsarzneikunde*, Vol. xv., p. 369.

Spontaneous Fracture of the Ribs through Muscular Action.—Dr. Groninger relates the case of a strong, healthy labourer, aged 46, who slipping while walking only saved his footing by the exertion of considerable strength. While recovering his balance he felt a sharp pain of his right side, which was aggravated by inspiration and by exertion, so that he reached home with difficulty. On examination a very tender spot of about half a hand's breadth was found in the axillary region of the seventh and eighth ribs. Crepitation was not distinct, and emphysema was not present. As the pain occurred so suddenly and was limited to so small a space, it was contended that a rupture of musole had taken place, although the absence of all swelling and effusion, as well as of any vacancy amidst the fibres, rendered this not very probable. Pleurisy was set up and the patient was confined to bed for a fortnight, and when all traces of pain had left the part the deposition of callus plainly showed that there had been fracture of the seventh and eighth ribs.—*Archiv der Heilkunde*, Vol. i., p. 473.

Case of Ovariotomy in Tanjore.—A Native Surgeon, P. S. Mootoosawmy Moodelly, in charge of the Civil Hospital, Manargoody, Tanjore, relates a successful case of ovariotomy which occurred in the person of a Malabar woman, aged 24. She had been married ten years, and had had one child, but for 28 months prior to the operation, menstruation had totally ceased. The date of her complaint is not stated, but she had been tapped several months prior to her admission. Chloroform was employed during the operation, and the temperature of the room was kept at 85°. When the tumour had been exposed by an incision 4½ inches long, it was tapped, several pints of fluid being discharged. The wound had to be extended another inch before the tumour could be removed. It weighed 12 lbs. 13 ozs., and contained 21 pints of fluid. Notwithstanding that the patient suffered much from dysentery, she was enabled to leave the Hospital by the fifty-fourth day. The catamenia returned four months after the operation, and when last seen, fifteen months afterwards, she continued quite well.—*Madras Quarterly Journal*, No. 1, p. 177.

(a) *Medical Times and Gazette*, Vol. i. for 1860, p. 583.

Alcoholic Icterus.—The following are the conclusions of an elaborate memoir upon this subject, read by Professor Leudet at the Paris Biological Society:—1. The use of large quantities of alcoholic drinks, only slightly diluted, gives rise, in certain cases, to acute icterus. 2. The acute icterus of drunkards is generally accompanied by intense yellowness of the skin; it is generally apyretic, and even accompanied by a markedly slow pulse, by decided depression of the nervous system, vertigo, syncope, etc. 3. It does not come on immediately after the excess, the yellow colour of the skin being preceded by more or less intense gastric symptoms, epigastric pains, vomiting, and generally by pain in the right hypochondrium and enlargement of the liver. 4. It usually terminates in recovery, although death may come on during a state of coma, or in consequence of intra-visceral hæmorrhage. 5. On examination after death the liver may exhibit the lesions of acute atrophy, and the stomach signs of acute, or even ulcerative inflammation. 6. It is usually met with as a consequence of immoderate use of little diluted alcohol by habitual drunkards. 7. The treatment should consist in the use of local anti-phlogistics and emollient drinks. 8. The disease is the result of a direct absorption of the toxical substance by the liver, the alcohol also acting as an irritant of the stomach.—*Gazette Médicale*, 1860. No. 28.

Aconite in Internal Ophthalmia.—The effect which aconite exerts in producing great dilatation of the pupil, in diminishing the frequency of the pulse and respiration, and in increasing the secretion of urine, indicated the probability of its proving of utility in certain forms of ophthalmia. The results of the trials which Dr. Blodig has made are very preferable. To all other preparations he gives the preference to a tincture made from the fresh root. Of this he gives from five to ten drops for a dose, never going beyond forty drops per diem, and preferring to accomplish his end by small and frequent doses. When any effect is exhibited on the pulse or urine he at once diminishes the quantity or frequency of the dose. He cites some cases of severe internal inflammation of the eye, in which the diminution of pain and other symptoms took place with great rapidity. He has employed the same means with marked advantage in rheumatic odontalgia and in neuralgic affections of the fifth pair. In this last class of affections, however, he has found the tincture of pulsatilla still more efficacious.—*Zeitschrift Wien Aerzte*, 1860. No. 43.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

GERMANY.

MUNICH, April 8.

THE admirable letter of your Vienna Correspondent, which appeared in the *Medical Times and Gazette* for March 9, and in which the misdeeds of the sisters of the Order of St. Franciscus of Assisi in the Wieden Hospital were exposed, has been read here with the greatest interest. In that letter it was mentioned that the order of the Wieden Sisters was not identical with that of the Greys, or the Sisters of Mercy, who have never been guilty of such repulsive practices. The same may be said in favour of those sisters who have the care of the sick in the Hospitals of Munich and other towns of Bavaria. These belong to the order of St. Vincentius de Paula, which has its origin in the Alsace, and in 1831 first came to Munich, where the service and the nursing of the patients, as well as the economy of the Hospital (diet, laundry, etc.), were handed over to them. They are under the immediate spiritual superintendence of the Archbishop of Munich, and as to nursing and the general economy they have to obey the director and other authorities of the Hospital. Such abuses, therefore, as have taken place in Austria, are not possible here, as our sisters are not independent but responsible; and if complaints have been made against them, they have generally been of an unimportant character.

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FEVER AT MUNICH.

In my last letter I mentioned that fever has scarcely left us for the last twenty years. It first broke out in 1839, and from that time a more or less severe epidemic has taken place every two or three years. Professor Von Gietl, who, since 1838 has been Chief Physician to the first Medical Clinic at this University, has made a special study of this disease, and more particularly of its ætiology. He has related the results of his observations for a number of years in his Lectures on the Principles and Practice of Medicine, and has recently published them in a pamphlet entitled, "Beobachtungen aus der Medicinischen Klinik und Abtheilung des Professor Von Gietl im Allgemeinen Krankenhause zu München. München, 1860." (Observations made in the Medical Clinic and Wards of Professor Von Gietl in the General Hospital at Munich.) I believe that a short account of these results will be so much the more interesting to you, as one of your countrymen—Dr. Budd, of Bristol—in his researches on the ætiology of enteric fever, was led to almost identical results; and the fact that two eminent Medical men, without having any previous knowledge of each other's researches, agree in their conclusions, certainly speaks greatly in favour of their theories.

According to Von Gietl, enteric fever is a specific zymotic disease, which very seldom attacks the same individual twice. The poison of the disease adheres to the evacuations, which retain the contagion even if they have undergone chemical changes by fermentation and putrefaction. The poison thence passes into the air, in which it floats like spores, and is deposited on the walls and objects which are near the evacuations. Under certain circumstances, especially if the air is moist and warm, it retains its virulence for a long time, and is easily propagated. Von Gietl has also shown that certain local conditions favour the spread of enteric fever. The disease never dies out in certain parts of Munich, where there are always some patients suffering from it: these are the permanent nuclei of the disease; in other localities cases of it occur only now and then—they are the temporary nuclei of the disease. Those streets and houses which form permanent nuclei, are badly built and generally damp. The cesspools and the drink water, especially the water from the wells, are the sources from which the fever poison arises. The cesspools are badly constructed, in bad repair, and are frequently not cleansed for two or more years. It is true that some houses are drained; but the sewers are so defective that the fæcal matters accumulate in them, and they are therefore nearly as bad as the uncleansed cesspools. In many houses there are wells close to the cesspools, and they are, of course, contaminated by the latter. Many of the patients observed in the General Hospital had evidently only caught the fever in consequence of drinking such water; and the epidemic which lately broke out in the Convent of the Sisters of Mercy, and which I described to you in my last letter, is, again, a proof of this. Another important point in the ætiology of fever is the following:—It is customary in this city to use the remotest, smallest, and darkest closets in the house as bed-rooms; and especially the sleeping apartments of servants, journeymen, and others similarly situated, are narrow, damp, dark, and often close to the cesspools. Persons habitually sleeping in such bed-rooms suffer from the worst forms of fever. We have often observed that if fever breaks out in a house, different persons are affected by it in a different degree of intensity: one complains of indigestion, another of obstinate diarrhœa, a third of vomiting and diarrhœa, a fourth of gastric fever, and two or three more of real and vehement typhoid fever. A patient often carries the disease from one house to another by his evacuations; the virus then adheres to that house, and other inmates are affected with it. If typhoid fever has once settled in a house or in a street, it takes a considerable time to dislodge it; and the best remedy would be to pull the house down in which it exists. These observations have been made here over and over again; and they are so far important as they show what ought to be done to prevent the disease.

THE IODINE WATERS OF BAVARIA.

Perhaps there is no country in the world so rich in mineral springs containing iodine as Bavaria. The waters of Heilbrunn, the iodine spring of Salzbrunn, near Kempten, and the waters of Krankenheil, near Tölz, are known everywhere; and only a few months ago a new spring with the same ingredients has been discovered at the foot of the Bavarian Alps at Partenkirchen, near the Kanitz spring. According to the analysis of it just made by Professor Buchner, it is one of the strongest iodine waters which is known. If the water is acidulated with a few drops of nitric acid, and a solution of starch is then added, an intense blue colour is immediately perceived; if it is then shaken together with sulphuretted carbon, it becomes red, etc. The water of Heilbrunn, however, is still stronger than this one. The iodine is contained in this new spring as iodide of sodium, and besides this, carbonate of soda and a considerable quantity of sulphuretted hydrogen are found in it; so that the water can also be used as a sulphur spring. A thorough analysis of it is just now being made.

THE SPRINGS OF KRANKENHEIL.

The most frequented among these iodine waters is Krankenheil. This spring is situated in Upper Bavaria, about three miles from Tölz, thirty-five miles from Munich, at the north-eastern side of the Blomberg, and is 3452 feet above the level of the sea. As there are no houses in the immediate neighbourhood of the spring, the water is daily carried to Tölz, where numerous and good lodgings may be obtained, and every contrivance necessary for drinking and bathing exists. There are four springs here, which are distinguished from the other iodine springs at Heilbrunn, Kreuznach, Hall, Luhasowitsch, Hubertusburg, etc., by the soda and sulphur they contain. Three of them are internally administered: 1st. The Bernardsquelle, which contains a smaller amount of minerals, and only smells at times, and then only in a slight degree, of sulphuretted hydrogen; it is especially suitable for weak constitutions. 2nd. The Johann-George-spring, which always shows a large amount of sulphuretted hydrogen, and is especially employed where a strong action upon the skin and the sympathetic system is necessary. 3rd. The Anna-spring, which contains about three times as much sulphuretted hydrogen, and furnishes five times as much water as the two others, so that now 150 to 160 baths may be given daily. According to the analysis recently made by Professor Fresenius of Wiesbaden, the several springs contain the following substances:—

	Bernardsequelle.	Johann-Georgequelle.	Annaquelle.
Sulphate of Potash	0·074	0·094	6·167
Sulphate of Soda	0·089	0·095	2·253
Chloride of Sodium	2·278	1 799	0 232
Iodide of Sodium	0 012	0·012	0·009
Bicarbonate of Soda	2·569	2·483	1·494
Bicarbonate of Lime	0·782	0·708	1·917
Bicarbonate of Magnesia	0·229	0·229	1·841
Bicarbonate of Iron	0·002	0·001	—
Bicarbonate of Manganese	0·001	0·001	—
Silicate of Alumina	0·016	0·021	0·109
Silica	0·075	0 069	0·058
Total	6·077	5·508	7·981

And cubic inches (32 in the pound) of the following gases:—

Carbonic Acid	0·285	0·324	0·638
Sulphuretted Hydrogen	0·076	0·051	0·213

The temperature of these springs is 45·5° to 47·75° F. 45·5 to 47·75° F. 47·75° F.

They contain, besides traces of bromide of sodium, borate of soda, carbonate of lithia, carbonate of baryta, carbonate of strontia, phosphate of lime, resin, other organic matter, and carbonate of ammonia.

The waters of Krankenheil are not only used internally, but also externally, for general and local baths. If they are given as an internal remedy, half-a-pint is ordered at first, and the dose is gradually increased to a quart. Stronger individuals may at once take a pint. The water is either taken pure or mixed with whey. The baths are taken lukewarm or warm, and the affected parts are rubbed while the patient is in the bath; he is afterwards well wrapped up in blankets, and put in a warm bed. If the weather is nebulous, cold and damp, the patient ought to rest longer, and take some exercise before he ventures into the open air. In the commencement of the treatment the patients remain in the bath for ten minutes, and this period is gradually lengthened to a quarter, half, and even a whole hour.

A salt is prepared from the water by evaporation. A hundred grains of this salt contain 0·198 grains of iodide of sodium; the largest part of it consists of carbonate of soda and chloride of sodium. This salt is used internally and externally, and is sent to other places. It is also often used for making cataplasms for engorged glands, diseases of the skin, etc.; one ounce of this spring-salt is dissolved in a pint of Krankenheil water, a piece of linen is then soaked in it, and afterwards bound on to the affected part. It is renewed

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as often as it has become dry; by this means the mineral water is absorbed by the suffering part, which is, at the same time, in a constant vapour-bath. The spring-salt is also employed for local steam-baths; which is done by adding one to two drachms of spring-salt to a quart of Krankenheil water, and heating the solution in a saucepan; the steam is then carried, by means of a caoutchouc tube, to the affected part. These steam-baths are useful in chronic catarrhs of the lungs, hoarseness, leucorrhœa, etc. Finally, the spring-salt, dissolved in the mineral water, serves for injections in leucorrhœa, fistula, especially such of a strumous character, etc. As the spring-salt is easily soluble in water, and forms a firm soap with fat, such soaps are also manufactured; and two sorts of it are much in use now, viz. the iodine-soda-soap, and the iodine-soda-sulphur-soap. They are used in chronic eruptions of the skin; the former especially in cases where the skin is delicate. One to two pieces of it are taken for one bath.

In my next letter I shall give you the special indications for the therapeutical use of Krankenheil.

Bonn, April 15.

ON PIROGOFF'S AND SYME'S OPERATIONS.

No doubt your readers are aware that the French Surgeons do not look with much favour on Pirogoff's amputation of the foot with transplantation of part of the calcaneus; and also that many others have shown an unfounded prejudice against this interesting addition to operative Surgery. The well-known national vanity of the French may play some part in this dislike; whatever has not been invented or discovered in Paris is generally an object of pity to our lively neighbours across the Rhine; and it is, perhaps, for that reason that they have also rejected Syme's operation. The Germanic races are more liberal and impartial, and thus the invention of the Russian Surgeon was soon acknowledged in Germany as well as in England to be of the greatest value. In the course of last winter we had the opportunity of observing the two operations mentioned performed upon patients by Professor C. O. Weber. The patient on whom this Surgeon did Pirogoff's amputation, was shown a short time afterwards as a perfect cure to the Society of the Lower Rhine. The operation had been done for caries of the ankle-joint; and although the patient appeared to be much exhausted by long suffering when he came under treatment, still the bones united by first intention, and the patient could walk on the stump without any pain three weeks afterwards. The extremity was shortened by three centimètres; a very simple, but suitable, shoe was provided for the patient which had a joint in the place corresponding to the ankle-joint; and he now walks with so much ease that in looking at him it is difficult to believe that he suffered a mutilation.

In the case of Syme's operation the cure required a much longer time. The patient was a very robust woman, aged 55, who had, in consequence of a neglected subdislocation, been affected with a painful inflammation of the ankle-joint. Professor Weber at first intended to merely make the resection of the astragalus, which was the principal seat of suffering; but in the course of the operation he had to give up this plan, as the calcaneus appeared to be also carious, and therefore Pirogoff's amputation could not be done. In this case the incision, which had been made into the skin, also closed by first intention; still a somewhat longer time elapsed before the granulations had entirely filled up the heel-cap, and a complete cure was protracted over two months. This was especially due to the circumstance that small abscesses had been formed in the sheaths of the tendons at the front, which retarded the recovery; but the final result was also as good as could be desired, as the patient can now walk with ease without the aid of a stick. A similar shoe as was provided for the patient mentioned before was given to her. The leg of this woman has been shortened by eight centimètres; but the stump is, as is generally the case after this operation, club-like, and quite broad enough to stand and walk upon. The introduction of these two patients to the Society before mentioned gave an opportunity for comparing the value of the two methods. After Syme's operation a cure will seldom be so rapid as it was in the first of the cases just mentioned; and this will always be a stronger motive for preferring Pirogoff's amputation than the greater length of the stump which is obtained than by Syme's operation, provided, of course, that the state of the calcaneus is such as to allow of the operation. In both the cases described the bones of the leg showed that softness and adiposity, which is so often found in the neighbourhood of carious joints, and which, even at the present time, still seems to many Surgeons a contra-indication of these methods, so that they prefer amputation on the so-called place of election. These cases also showed that this fatty degeneration is capable of a complete retrogressive metamorphosis, and that the softness of the bones is no reason for amputating higher up.

Professor Weber has recently given us a statistical comparison of the different amputations which are performed in the neighbourhood of the ankle-joint, and which may be of some interest to your readers. The cases brought together have been collected from the German, English, and French Hospital Reports. As regards Syme's operation, much preparatory work to this had been done in the valuable work of Professor Günther, of Leipzig: "Lehre von den Blutigen Operationen" (A Treatise on Bloody Operations), to which numerous plates are added; and there is also a well-written *thèse* on the results of Pirogoff's amputation by Dr. H. Kestner, of Strasburg, which appeared in 1857, and in which twenty-two cases have been collected. Altogether, 216 amputations have been published. Of these, 34 were made close above the malleoli, 101 according to Syme, with anterior flap, 40 according to Pirogoff, 8 below the astragalus, at first by Textor, later by Malgaigne, 21 according to Chopart. From these returns it appears that the amputation close above the malleoli and Chopart's method give the most favourable results as to mortality. In the first only three per cent. died; the amputations according to Syme and Pirogoff gave equal results, as 15 per cent. died by each of these methods. In the operation according to Baudens, 33 per cent. died, while the operation of Textor and Malgaigne, below the astragalus, shows only one death in 8 cases. This seems certainly to speak in favour of the amputation above the malleoli, to which so many objections have been made; but, perhaps, a larger number of cases might give a different result. In the fatal cases operated upon according to Syme and Pirogoff, death was mostly due to gangrene of the heel having supervened; this is still more frequent if the flap is formed from the thin skin at the back of the foot, as is done in Baudens' operation. In Pirogoff's amputation, the number of cases in which gangrene was induced, amounted to 12, in Syme's to 20, in Baudens' to 25 per cent. Independently of this, however, the first mentioned operations yield exceedingly favourable results; the stumps are always useful, and there is only one case known of Syme's operation in which the stump was so painful as to prevent walking; and only one case of Pirogoff's in which caries recurred and a subsequent amputation became necessary. In this respect, the results are much more unfavourable in the amputation above the malleoli. The circular incision, even if a large cuff should be formed, is not nearly so good as the formation of a flap, especially if the latter is made posteriorly and sufficiently large. The complaint that a conical stump is generally the result of this operation, is of less moment than the continuous exulceration of the cicatrix which is apt to ensue; and in some cases it has even been necessary, in consequence of such an occurrence, to amputate the stump again. Some time ago, a patient, who was under the care of Professor Busch, of this University, and in whom both legs had been amputated close above the malleoli, was obliged to undergo amputation at the place of election on that account, which was successfully done. Amputation above the malleoli shows about 25 per cent. of unfavourable results; and the number of such is just as great after Chopart's operation; although in this town a number of successfully performed operations, according to Chopart, have lately occurred in the practice of Professors Wutzer and Weber.

The question, what is the cause of the drawing up of the heel, has been much discussed; and M. Szymanowsky has recently sought the reason of it in the form of the astragalus, which is narrower on the back than in front, and which is, therefore, driven forward and out of the niche between the malleoli; but the mere retraction of the tendon of Achilles does not seem to be a sufficient reason, as M. Verneuil has in several cases, in which he made an anatomical examination of the stump, found this tendon quite relaxed. The best means to prevent the drawing up of the heel, seems to be a union of the tendons of the back of the foot and the plantar flap; and in order to effect this, the latter ought to be made as large as

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possible, and the tendons ought to be left as long as possible.

As the time which is required for the cure has, in many cases, some influence upon the choice of the method, and is especially to be considered in amputations made during war, I may mention that Professor Weber has found that the cases of Syme's and Pirogoff's operation in which the cure took less than a month, were far more numerous than such of amputation above the malleoli. Of this latter and of Chopart's operation, only 27 per cent. were cured in less than a month; but of Pirogoff's and Syme's more than 40 per cent. This circumstance, of course, does not absolutely decide the question; and the most important point will always be the complete removal of all diseased and the preservation of all healthy parts—a principle the correctness of which cannot be denied by even the most conservative Surgeons.

I conclude with a few remarks upon the method of operating in Pirogoff's amputation. During the last year, a controversy took place in the columns of one of your London contemporaries, between Professor Pirrie, of Aberdeen, and Mr. Watson, as to which of them had first made this amputation without previous disarticulation of the astragalus. I believe that both these gentlemen were led to the idea of simplifying the operation independently of each other; but I may remark that before either of them, Dr. Schultze, formerly assistant to Professor Pirogoff, had, in 1854, recommended that the calcaneus should be sawn through from below, to avoid disarticulation. No doubt it is more difficult in this operation, to preserve the A tibialis postica, which is of the greatest importance, as the nutrition of the flap depends upon it; and I may also say that, in case the calcaneus should, contrary to what had been expected, prove to be entirely diseased, a subsequent disarticulation of the process would be attended with great difficulties; and it is always advisable that the Surgeon should reserve to himself the possibility of eventually performing Syme's operation. The modification alluded to has, therefore, not met with much encouragement in Germany. Whether the tendon of Achilles ought to be cut through, and whether the sawing should be more or less oblique, must depend upon the rigidity or softness of the surrounding parts, which are often much infiltrated. If such is not the case, it is not difficult to put the sawed surfaces together; otherwise the means just alluded to must be employed. That the bones sawed through should be closely adapted to each other, is of the utmost importance for a rapid union; and this is the reason why some Surgeons (for instance, Professor Langenbeck, of Berlin) have even united the bones by means of silver wires. But this is not always necessary. I hope that this communication may assist in setting aside some of the prejudices which still prevail with many Surgeons in your country, regarding Syme's and Pirogoff's amputations, which have not yet been so extensively tried as they deserve.

SWITZERLAND.

Berne, April 8.

THE LATE FATAL ACCIDENT IN THE BEAR-PIT.

Agreeably to your request, I to-day send you a full and detailed account of the fatal accident which happened a few weeks ago in the bear-pit of this city. I do so the more readily, as the reports which have appeared on it in foreign, and especially in English newspapers, are full of the grossest misrepresentations, which should not be allowed to go forth uncontradicted. I only regret that I cannot give you such a complete pathology of the case in question as I should have wished; for this, however, you must not find fault with me, but with the English Ambassador in this city, who refused a regular post-mortem examination of the deceased to be held, and only allowed an inspection of the body as might be made without opening the cavities. This examination was made by Professor Demme, the Director of the Surgical Clinic, and his son, Dr. Hermann Demme, who is also connected with the University. But at first I will detail the case as it happened, and as has been brought to light by the most searching judicial examination of witnesses.

M. Lorck, of Drontheim, in Norway, a gentleman of good family, whose father is Norwegian Consul at Hamburg, and who was about 35 years of age, had been staying in this place for some weeks. He had been a Captain in the English Foreign Legion during the Crimean War, where he had greatly distinguished himself. He was on intimate terms with the diplomatic corps of this town. On Saturday, March 2, he dined, at six o'clock p.m., with two or three friends, in the Gasthof zum Falken; and they left there at nine o'clock. At eleven, M. Lorck returned to the hotel with six or seven gentlemen, and remained with them in his apartments up to half-past two o'clock in the morning. About this time they all went out, somewhat excited by the champagne of which they had freely partaken, but not intoxicated, as the host, who had opened the street-door to them, distinctly affirmed. Between three and half-past three a.m., M. Lorck went with a young Englishman to the bear-pit, which is situated at the lowest extremity of the town, beyond a large stone-bridge, and which had been a favourite resort of his, as he used to go there daily. He now amused himself with climbing up the railing which surrounds the pit, and which is partly made of brickwork and partly of iron; while the Englishman, who had accompanied him, vainly endeavoured to prevent him from doing so. After M. Lorck had repeatedly succeeded in climbing over the railing inside, and again backwards to the outer side of it, he suddenly made a false leap, dropped his hold of the railing, and fell into the pit, which is about fifteen to twenty feet deep. He there remained lying on the ground, and the Englishman went away at once to fetch assistance. As he did not find anyone in the neighbourhood, he hastened into the city and called out some of his friends. After these had dressed and made their appearance, they all went to a baker's shop in which they saw light, and where some journeymen were at work. They were dreadfully excited, and tried to make the journeymen understand what had happened; but these only followed tardily, and after having evinced some reluctance. Six persons now came to the pit; on going there they had also called out the gens d'armes stationed nearest to it.

About twenty to twenty-five minutes had now elapsed since M. Lorck had fallen into the pit. When the party of Englishmen and journeymen bakers arrived they found the unfortunate man standing upright in the pit. It seems that the bear then, for the first time, approached his victim. It is possible that M. Lorck had not even known before that the bear really was in the pit; and in fact, that the animal was there was an extraordinary accident, as the bear is generally kept in the cage at night; but a very short time ago the she-bear had got cubs, and in order to protect these the bear had been locked out of the cage. When the animal approached M. Lorck he held his hat and umbrella towards it, and his friends tried to second his efforts by throwing clothes, hats, and linen handkerchiefs at the head of the bear, who was probably irritated by these endeavours. A journeyman baker now stepped across the railing upon the wall which divides the pit in two compartments, and which is very low, and tried to drag the unfortunate man in the pit out of it by the hand. But neither he nor M. Lorck were in a fit position, nor had they sufficient power, to effect this; and twice they were obliged to let go their hands.

In the meantime the others who were present had tied different articles of dress together to form a cord, which they dropped down into the pit, but this broke when M. Lorck was suspended by it in the air, and he thus again fell to the ground. Up to that moment the animal had not attacked M. Lorck in a serious manner, but it now approached him, took the unfortunate man between the paws, and rolled him round from one side to the other. A strong cord had at last been fetched from a neighbouring inn, but the time was passed when any good might have been effected by it.

The Englishman who had been with M. Lorck from the beginning had, in the mean time, hastened to the guard-station in order to procure fire-arms. As he did not speak German, was without hat or coat, and in a terrible state of excitement, the military believed him to be insane, and refused to hand fire-arms over to him; but, after some deliberation, the commanding officer sent a few gens d'armes with him. As the bears have been kept in the pit of this city for centuries, and never any one of the inhabitants has fallen into it, the military can scarcely be blamed for not attaching, in the first instance, any belief to the incoherent statement made by the Englishman. When the gens d'armes, who had brought a ladder, arrived at the pit, about twenty-five to thirty minutes after the bear had first attacked M. Lorck, all was over. The unfortunate man then no longer gave any signs of

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life; while only five or seven minutes before he had called out to Count Latour, who had remained at the pit,—"Tirez donc, car sans cela cette vilaine bête me tuera!" His voice had then been hardly changed. Soon after the last few words spoken by M. Lorck the bear, who is an unusually large animal, and far exceeds the size of a man, had thrown himself upon the chest of his victim, and those present believed that he had suffocated him. When the gens d'armes arrived, M. Lorck lay about ten yards from the place where he had been originally attacked, near a little pool of water. The gens d'armes had only loaded their muskets with small shot, and, in spite of the strong demands of M. Lorck's friends, they agreed that, even if the unfortunate sufferer should still be alive, a shot in the utter darkness which then prevailed was too great a venture, as the effect of it might be quite contrary to that which was desired. It soon appeared, however, that the only thing that could be done was to remove the dead body of the victim from the pit; and even this was not accomplished without danger, and only after a considerable time had elapsed. I pass over this part of the sad tale, and only mention that a doctor who had been called to the pit from the city confirmed the death of M. Lorck, when the body had been at last, almost entirely devoid of garments, rescued from the grip of the bear, who, after having killed his victim, kept running to and fro, at times smelled at the dead body, and rolled him from side to side. The whole affair again proves that there are events which seem predestined to be fatal, and where a deliverance, which appears easy enough, becomes impossible. The first half hour, when it could not have been difficult to extricate M. Lorck from his terrible situation, was entirely wasted. If the Englishman who was present had spoken intelligible German, if somebody had been made aware of the accident who knew where the fire-escapes are kept or had only been acquainted with the locality, all might have been well. Still it is painful to see that everywhere the negligence of those present is spoken of in reproachful terms, and not a word is said in acknowledgment of their attempts to save the victim, which were connected with considerable danger to themselves.

THE POST-MORTEM INSPECTION.

On the morning of March 4, thirty-two hours after death had taken place, a post-mortem inspection of the body was made. It was that of a man in the prime of life, with unusually powerful, almost athletical proportions; it was six feet long. The face was partly covered by a brown beard, and bore a surprisingly placid expression, considering the mode in which death was brought about; for this perhaps the supposition of Dr. Livingstone may account, who says, that those killed by savage animals are, when struck by their paws or teeth, stupefied and rendered insensible to pain as by chloroform. On the forehead, immediately above the left supraorbital margin, there was a rather sharp wound with strongly suggillated edges. The skin on this place was somewhat mangled, and the nasal bone broken. The nature of these lesions was so greatly different from those on other parts of the body, that we may well conclude that they were caused by the first fall of the sufferer, but not by the violence of the bear. Except a few suggillations of the skin of the head, this was otherwise not injured. The neck, which was short and full, showed at the right side a few parallel superficial excoriations, which have to be ascribed to the effects of a grazing paw.

On inspection of the trunk, it was surprising to see that the right side was almost exclusively the seat of the lesions, while the left showed only a few traces of them—a fact not explained by those, who witnessed the combat between man and animal. The vertebral column showed no fracture anywhere; which was easily ascertained, as the rigor mortis was not at all considerable. Neither were there any fractures on the thorax. On the skin of the right side of the chest, especially near the spine, there was a series of excoriations, which were confined to the cutis, and were of such peculiar aspect, that no doubt could be entertained about their having been inflicted by the claws of the bear.

The right shoulder showed, on its anterior margin below the acromion, and on the external posterior margin, a series of wounds caused by biting; the depth and position of the former corresponded to the rows of teeth in the lower mandibula of the bear, while the latter had evidently been caused by the teeth of the upper jaw. Close to the axilla there was one very deep hole made by biting; an accurate examination of the axilla, however, showed that the branches of the brachial plexus and the large vessels in the axilla were not injured. On the right arm a great many wounds, caused by the teeth and claws of the animal, were seen. Some of them were sharply-defined and penetrated the skin vertically, while others appeared jagged and were more extended, perhaps in consequence of some resistance made by the unfortunate sufferer.

The whole abdomen showed excoriations in a transverse direction, some of which were broader, while others were narrow, and some penetrated the whole thickness of the skin, while others were very superficial. Part of them had evidently been caused by strokes of the whole paw, part by a gripe of the claws. The genitals, which by their smallness reminded one of the ideal of bodily power as expressed by the Greeks in their statues of Hercules, were perfectly intact.

The right thigh showed about twenty deep wounds, caused by the teeth and strokes of the paw; but the large vessels and nerves had here also escaped injury, although some of the wounds were one to two inches deep. One deep and jagged wound, caused by biting, was on the thigh, just above the vastus externus: and a mass of mangled muscular fibres projected out of it. This wound afforded a favourable opportunity for studying the mechanism, by which a more considerable loss of blood had been prevented. The small vessels, which belong to the terminations of the arteria circumflexa femoris externa, appeared to be dragged out and twisted round, and were closed by small thrombs. Immediately above the patella a deep wound, made by biting, seemed to penetrate towards the joint; but it was not allowed to open this. The aspect of the right leg was positively frightful: the whole calf was torn away. Two deep cavities, with jagged edges, similar to the origin of the serratus anticus muscle, which had been produced by the insertion and dragging through of the whole rows of teeth, seemed to prove that the enormous loss of substance had been produced by two distinct inroads of the jaws. The examination of these wounds gave, indeed, results of a peculiar interest; the boundary between life and death of the unfortunate man could here be shown in a way, which was very instructive in a medico-legal point of view. The upper part of the wound showed the same signs as all the wounds described until now. Bloody imbibition of the parts, extravasation of blood into the muscular tissue, thrombs in the small vessels which had been dragged out, ecchymoses in the edges of the skin, were the principal signs which showed that these wounds had been inflicted during life. All these symptoms were wanting on the lower part of the wound, which quite resembled those cut surfaces which are produced in dissecting dead bodies. The walls of the posterior tibial artery, which was much dragged out and torn, did not show any suffusion, and it had not been closed by a thrombus. Life, therefore, no doubt, became extinct after the rows of teeth had been for the first time inserted into the calf; the second bite was inflicted on a dead body only. On the whole of the left side there were only a few superficial wounds on the extremities, which had been caused by biting and dragging. No wound had penetrated any of the cavities.

If we may judge from this partial post-mortem examination of the manner in which the death of M. Lorck was brought about, it does not appear probable that he died by suffocation, nor was death caused, as has been erroneously asserted in some newspapers, by the fall into the pit. Neither the wound on the head which allowed a speedy return to consciousness, would justify the supposition; nor does the whole course of events lead us to believe that a rupture of internal parts had been caused by the fall. Nor can anyone of the lesions I have described, singly be thought sufficient to account for the death; and we are therefore left to conclude that it was one of those cases, in which death is caused by the whole amount of wounds taken together, the terrible pain, the loss of blood and the exhaustion consequent upon it. In the same way soldiers have often died, when condemned to run the gauntlet; in cases of that kind each wound singly is no more than a simple excoriation of the skin; still death has often occurred within twenty or thirty minutes, when the pain and distress were extended to hundreds of such lesions. How much more easily death

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may be explained in the case of M. Lorck, where some of the wounds were of a very grave nature!

THE MEDICAL FACULTY.

After having thus, according to the best of my ability, conformed to your wish, I will give a few particulars of the present state of our University. You may have seen it mentioned in the papers that we have quite recently lost our excellent Clinical Teacher, Professor Vogt (the father of the well-known statesman and zoologist Karl Vogt) who died here on February 1. Although he had reached the age of 72, we might say that the wonderful old man was still in the prime of life, and he certainly superintended his Clinic with unvarying zeal until a very short time before death overtook him. Professor Vogt's instance showed in an uncommon degree, how important the personal qualities of the man are for the success of the teacher. It would have been easy to find a Physician better versed in the results and methods of examination, which are now in use in the rapidly-progressing Science of Medicine; but it would be scarcely possible to find a man who more intimately coalesced with his pupils and his vocation, who was always serene and amiable, and ever remained faithful to his principles. His loss has been a far heavier blow to us than the modest Professor himself would have imagined. Up to the present moment only a temporary arrangement has been made for the administration of the clinic left vacant by Vogt's death. The Medical Faculty has proposed Dr. Biermer, of Würzburg, as successor to him. This gentleman is well known for his excellent reports in Canstatt's Jahrbücher, and for some monographs on Medical subjects. Dr. Ziemssen, of Greifswald, and Professor Wagner, of Leipzig, also hold some chance of being called here. It is greatly to be regretted that Government is at the present moment so much occupied with other questions, that the definite settlement as to who shall fill the Chair of Clinical Medicine, will be deferred for some weeks longer. We fear that by this circumstance many students will be induced to transmigrate to the other Universities, and more especially to the sister city, Zurich, where the authorities are always most anxious to keep the Medical instruction up to the very highest standard.

In another letter I shall give you some information about the organisation of the Army Medical Department, which is just now one of the exciting questions of the day in this city.

LIVERPOOL.

April 23.

Since the date of my last communication another fatal case of the recent fever has come to my knowledge—that of a young gentleman from a Naval School who had gone, with several of his companions, on board the *Scheah Gehald* before any alarm as to the disease existing on board had been given. He died of well marked typhus after about ten days' illness. The ship on board which this school is held, lies in a healthy part of the river, the sanitary condition of the ship itself is very good, and the health of the boys excellent; so that although it was impossible to remove him from the ship (for by the time that the typhus symptoms became decisive, he was so ill that it seemed dangerous to move him), the simple precaution of keeping the patient completely isolated sufficed to prevent any extension of the disease.

I am glad to say, also, that there has been no increase of typhus in the town; one trivial case of fever occurred near Paul-street—the patient having been near the Egyptian sailors when they came up to the baths; but I am informed by the District Medical Officer who has that locality under his charge, that no other has come under his notice, and that in this case, the house in which the patient lived is unhealthy, and there had been typhus in it three months since.

Next, as to the four points mentioned in your paper of the 13th inst. as requiring further elucidation; the first—whether there was typhus among the Egyptian crew when they infected their Liverpool victims—is, I think, sufficiently answered by Mr. Irvine's letter of last week, by Dr. Cameron's statement sent to you, and by the evidence of the superintendent of the Paul-street baths, who states that, excepting one man who had to be sent from the baths in a car, all who came from the Egyptian frigate appeared to be well. It must be remembered, also, that they had all walked up from the Sandon Dock, a distance of about a mile and a-half. The absence of typhus from the three original centres of infection is thus, I think, clearly established. In reference to the second point, I may add that the captain of the frigate assured a Medical friend of mine that he had not known of any fever among the crew during the whole of the voyage, nor of any of them having been exposed to the risk of infection. The third and fourth queries your readers will, I think, find fully answered in Dr. Cameron's communication.

I come now to the second outbreak of fever which occurred on board the *Voyageur de la Mer*, and the history of which is, I think, the most impressive part of that "Tragedy of Errors" in the performance of which at least ten of our countrymen, and probably three times that number of the Egyptians, have been sacrificed. The *Voyageur* is an American-built ship, belonging to the Pacha of Egypt. She came here about twelve months since, to be lengthened and to have new engines. She has lain in the Sandon Dock, and her crew, rather more than seventy in number, have lived on board since her arrival. They were a very different set from those of the *Scheah Gehald*. Their captain, an Egyptian officer, was most careful of the health and cleanliness of his men, who were provided with European clothing, and had a bath regularly every week. In consequence, the amount of sickness amongst them was no more than that which might be expected among any similar number of men. One case only of fever occurred during their stay, and that was about six months since. The patient was kept carefully apart from the rest of the crew, and recovered well, but was subsequently attacked with dropsy, of which he died in the Northern Hospital. Up to the time, then, that she was ready for sea, the *Voyageur* was clean, and her crew healthy. About 350 men from the *Scheah Gehald* were then transferred to her, among whom were some who had just left the Southern Hospital, and many sick. Some of the latter suffered from obstinate constipation, others from diarrhœa, but none from fever. All these were placed on the lower deck, where they lay closely packed side by side, huddled up in sacks, which covered them from head to foot; so that until one after another was shaken up, and put his head out of his packing, they might easily have passed for bundles of goods. The ventilation was next to nothing, and even on a very cold day the heat between decks was stifling, and the air thick and heavy with the hot breath and filthy effluvia of the sick; and in this state she put to sea.

Some parts of the history of her voyage to Malta I am enabled to give you through the kindness of a friend, who procured for me the letters of one of her passengers. Among the first items of news, he mentions that the heat and smell of 500 dirty men, who slept between decks, literally one over the other,—for one part lay on the deck, while the other hung in their hammocks just over them,—made him sick much sooner and much more severely than he would otherwise have been. On March 9, when leaving Holyhead, they noticed that the wind was rising, and it was not long before more serious dangers threatened them. The heat from the friction of the new machinery set fire to the woodwork, and, as they were making for the nearest port, the wind rose to a terrible storm; so, to avoid the rocky shore of the Scilly Islands, upon which they were being driven, they were obliged to stand out to sea. The fire was extinguished; but in a day or two more, the engines being still worked to the utmost to keep the ship, which now would not answer her helm, at sea, the fire again broke out, but was soon got under. Two very heavy guns on board next were thrown loose by the tossing of the ship and were nearly going through the side; a boat was lost; and, in endeavouring to speak a brig, they got foul of her; and, worst of all, by the time they reached Falmouth, five men had died. Sixteen were sent into Hospital at Falmouth, and more than eighty sick went on with the vessel to Gibraltar, where, on her arrival, she was of course boarded by the Health Officer, and the ceremonial usual on those occasions was duly performed: the bill of health was handed with a pair of tongs to the captain, and, when filled up, received back with the tongs, opened with another pair of tongs, and then returned without their aid; this last beautiful piece of symbolism being the signal that all who chose might come on shore. After leaving Gibraltar, another fire occurred,—this time from the sponta-

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neous combustion of cotton waste,—in uncomfortably close proximity to the powder magazine; but again the fire was extinguished without much damage. By the time the ship reached Valetta, twenty of the Egyptians had died since leaving Liverpool, and of the thirteen Europeans on board, six were dangerously ill of typhus. Of these, Captain Lawson and the cook died soon after they were landed, and the steward and three engineers were not expected to live. The head engineer has died since; and the last news from Alexandria brought the intelligence that the writer of the letters from which I have quoted was himself in Hospital with typhus, although he and the other passengers had left the *Voyageur* at Malta, and gone on by another vessel.

With regard to this second outbreak of fever, again the question arises, How did it originate? was the infection imported, or generated on board? I have mentioned that there had been one case of typhus among the crew of the *Voyageur*; but this, it must be remembered, was six months before, and it is hardly to be imagined that in a clean ship and among a healthy crew, the infection could have lain dormant for so long a time; and although there were on board the *Voyageur*, when she left Liverpool, some of the men who had been discharged cured from the Southern Hospital, there is nothing to render it likely that the mischief originated with them. We have now, in fact, no Medical evidence as to the existence of fever among the Egyptian crew of the *Voyageur*. Some information may, I hope, be obtained from the Hospital at Falmouth, into which sixteen are stated to have been sent. All the evidence I have been able to obtain here as to the likelihood of infection being carried by those who had been among the fever at the Southern Hospital is purely negative. The man to whom I referred in my last letter, who went from the Southern Hospital into one of the Surgical wards of the Workhouse Hospital, in which he soon showed symptoms of fever coming on, kept all the infection he had to himself. There have been also in a small ward of the same Hospital four patients from the Southern,—two of the Egyptian crew, with frost-bite only, and two European Surgical patients. The latter had had symptoms of fever which had passed off. These patients were, as a matter of precaution, kept at first as much as possible to themselves, but the nurses, Medical Officers, and some of the convalescent patients have been quite enough in contact with them to render it likely that had there been really any infection still hanging about them we should have had before this some proof of its existence.

Again, all the patients from the Southern Hospital, excepting those sent to the Fever Hospital, have been dispersed through the town. Had they carried any fever-making miasmata with them, we must before this have had a large increase of fever, and this has not been the case, so that the harmlessness of these patients, when in a good atmosphere, is, I think, clearly proved. While the fatal case at the Naval School shows that even this same fever is prevented from developing its fearful power of infection when it has to deal with cleanly people and good ventilation.

I venture to hope that this catastrophe may lead the authorities to the adoption of some stringent rules as to the reception of large numbers of sick men from on board ship, whether their disease be nominally infectious or not, and may make evident the need there is for the inspection of all sea-going ships which carry a large number of men. Every emigrant ship is inspected by a Medical Officer: why not extend the same principle to others, and insist upon a Medical inspection before a ship leaves the port, and require from all ships entering, that, if they have sickness on board, its nature should be certified to the Health Officer by the Surgeon of the ship, if she carries one, and if not, then that she shall remain in the river until a Medical Inspector has declared that it is safe for her to come into dock?

P.S.—News has been received here from Alexandria, of the arrival of the *Voyageur*, and that twelve more of the crew died after they left Malta. The Viceroy of Egypt has ordered an investigation into the whole matter.

We are happy to say that Dr. Henry Bennet, after spending two winters in Italy, is returning to Town in very much improved health. We also hear that Dr. Henry Bennet will be in Grosvenor-street on May 13, and that he intends to undertake consulting practice during the season.

REPORTS OF SOCIETIES.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, April 3, 1861.

Dr. Tyler Smith, President, in the Chair.

A Paper, by Dr. Pollock, was read, on

THE DIFFICULT POSITION OF THE HEADS IN TWIN LABOUR.

Mrs. ——, aged 25, her first pregnancy, and at her full time, was seized with labour pains at two o'clock a.m. on the 21st of February last. At ten o'clock p.m. the os uteri was sufficiently dilated, and the presenting part—the breech—low enough to allow of the lower extremities being brought down. In using the necessary force to extract the trunk and head, an unusual elastic resistance protracted the delivery. Between eleven and twelve o'clock p.m. the trunk was delivered with a head, which proved to be that of another child. On making an examination, the lower jaw of one child was found lying across the lower jaw of the other, and both completely locked. Thus the head of the first child dragged down the head of the second, and the head of the second held back that of the first, and produced that peculiar elastic resistance which was experienced in effecting the delivery of the first child. The labour was completed a few minutes before twelve p.m. Both children dead. The mother recovered without an untoward symptom.

Dr. Druitt communicated particulars of a

CASE OF PRESENTATION OF THE RIGHT SHOULDER AND ARM; SPONTANEOUS EVOLUTION,

which occurred in the practice of Mr. Charles Mayo, of Winchester. The arm presented, and it was found impossible, owing to the strong contraction of the uterus, to turn. In the absence of the Medical Attendant the child was expelled, evolution taking place.

A paper, by Dr. Barnes, was read, on the

INDICATIONS AND OPERATIONS FOR THE INDUCTION OF PREMATURE LABOUR, AND FOR THE ACCELERATION OF LABOUR.

The author, in referring to the history of this operation, observed that it proved conclusively the use of an Obstetrical Society. Before the operation was adopted, a consultation of eminent men met to discuss it. Under this sanction it was practised for a time; then became almost obsolete and forgotten. Had an Association been founded a hundred years ago in London, when the operation took its rise, this, one of the most beneficent improvements in conservative midwifery could not have been forgotten. The author traced the history of the various modes of inducing labour, discussing the action and merits of each. He first pointed out the essential distinction between the deliberate induction of labour and the precipitate *accouchement forcé* of the older French Practitioners. The only method used for a long time was the puncture of the amniotic sac directly over the os uteri. Experience showing that the premature escape of the liquor amnii led to the frequent peril of the child from undue compression in being forced through an imperfectly dilated cervix. Hamilton, to obviate this objection, substituted the separation of the membranes for a given space from the lower segment of the uterus; and Hopkins tapped the sac at a point remote from the os. Others gave ergot of rye. Merrem and Krause, in Germany, placed a flexible catheter in the uterus, leaving it there to excite pains. This plan was now adopted by Braun, of Vienna, who spoke highly of it. In 1820, Bünninghusen led the way in a series of proceedings for dilating the cervix by plugs and instruments of various kinds. In 1842, Hunter proposed to expand the vagina by inflating bladders introduced in a flaccid state. Braun then introduced his caoutchouc dilator. These contrivances have been followed by inflammation of the genitals and death. The application of galvanism, of the irritation of the breasts, of the carbonic acid gas douche, were adverted to. The carbonic acid douche to the vagina had caused sudden death in the hands of Scanzoni. In 1846, Kiwisch introduced the vaginal warm water douche; soon after Cohen, of Hamburg, revived

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a proposition of Schweighaüser, in 1825, to inject water into the cavity of the uterus. This, the intra-uterine douche, was now extensively used. The action and merits of the douche were discussed. Although easy and convenient, it was not free from objections. Dr. Guillier had related a case in which sudden death followed a vaginal douche, it being conjectured that air had passed with water through the Fallopian tubes into the peritoneum. Other fatal cases are known. The free injection of water into the uterus might detach the placenta; it might stretch the imperfectly developed uterine fibres beyond their power of reaction, causing paralysis. The author then adverted to the recent application of the caoutchouc dilator inside the os and cervix uteri for the purpose of dilating these structures. He quoted the case of Mr. Murray, and referred to the claims of Dr. Keiller and Dr. Storer. He then related two cases of placenta prævia, in which he had himself accelerated labour, successfully opening the cervix for delivery by turning by aid of water-power applied to the interior of the cervix. He also related the histories of three cases in which labour was induced and accelerated by the same method: one being a case of distortion of the pelvis simply, one of distortion complicated with cicatrised os, and one of almost complete obliteration of the cervix by cicatricial tissue He described the instruments employed, and the advantages attending their use. The caoutchouc dilator acted gradually and gently; unlike the douche, it admitted of being applied to the exact spot where a dilating and exciting force was required; as a means of overcoming rigidity, it was more certain and efficient than any other, superseding bleeding, incisions, tartar emetic, and the stretching by the hand. As an accelerator of labour, it was so perfect as to supersede altogether the *accouchement forcé*, an operation which might now be exploded. It enabled the Practitioner to deliver almost at will, not only on a fixed day, but at a predetermined hour, a power that gave us control over cases of convulsions, obstinate vomiting, exhaustion from disease or hæmorrhage, much needed and not hitherto possessed. In connexion with this subject, Dr. Barnes adverted to the importance of the method described by Dr. Braxton Hicks, of turning without passing more than two fingers into the uterus, by combined internal and external manipulation. Whenever expulsive pains could not be excited, this operation enabled the Practitioner to complete the delivery on the spot. The author concluded by classifying the methods of inducing labour according to their therapeutical application. They should be divided into—A. Preparatory measures. B.—Labour-provocative measures. C.—Labour-accelerating measures. He insisted much upon this division, believing that in many cases no one method could be relied upon, but that it was desirable to proceed in regular gradation through the stages of preparation of the soft passages, the evocation of contractile energy, and the acceleration of delivery, selecting in each stage such means as were most suitable. By the judicious consecutive use of these means we had it in our power to terminate a labour with certainty within a given time, and that with a greater amount of ease and security to the mother and child than had been hitherto attained. This increased perfection of the operation justified the hope that it might be applied to the relief of emergencies and dangers, which had heretofore baffled the skill of the Physician.

Mr. Baker Brown was glad to find, from the tables which the author had placed before the Society, that the most successful mode of inducing premature labour yet practised was that of puncturing the membranes. Mr. Brown had now for a period of twenty-five years adopted this mode of treatment in many cases, and could not recollect the loss of a single child or mother. He had tried the injection of hot and cold water into the vagina, as at one time so strongly recommended, and had found it so uncertain and tedious as to compel him to discontinue its use. The new plan that Dr. Barnes now recommended was evidently an excellent one, and differed from Dr. Keiller's only in the use of water instead of air. He emphatically said "Dr. Keiller's," because the plan had been unjustly ascribed to Mr. Murray, who was an assistant to that gentleman. Dr. Brown was much interested in the two cases recorded by Dr. Barnes of incision of the os uteri before he could proceed to bring on premature labour. This proceeding was to be highly commended, as it was well known to every practical accoucheur that in primiparous cases the os, when rigid and unyielding, was frequently lacerated by the violent expulsive uterine efforts, and yet no harm occurred to the woman from such laceration. So self-evident was this, that some gentlemen were in the habit of dividing the os with a bistoury, and by so accelerating labour prevent the chance of laceration. Mr. Brown could bear out from his Surgical experience of operations on the os, that the proceeding could be had recourse to with safety and advantage.

Dr. Priestley quite agreed that the induction of premature labour was one of the most important innovations which had been made in midwifery, and every contribution which tended towards the perfection of the operation deserved the utmost attention. Nothing, however, showed more conclusively the difficulty and uncertainty of performing it in certain cases than the diversity of methods which had been proposed. Dr. Barnes had enumerated almost a dozen methods of inducing premature labour, and proposed to add another to the list. He (Dr. Priestley) was little acquainted as yet with the method of inducing labour by caoutchouc dilators, although he knew his friend Dr. Keiller, of Edinburgh, had taken great pains in adapting them to various obstetric purposes, and he had read with interest the case described by Mr. Murray. He must, nevertheless, protest against the opinions expressed by the author of the paper, and endorsed by Mr. Baker Brown, concerning the value of statistics in determining questions of practice. Whatever might be the value of individual observation and experience, they formed but very limited data on which to found general conclusions, and it must be borne in mind that statistics were really nothing more than the results of personal observation by many individuals arranged and tabulated. That statistics might be abused was no valid argument against their legitimate use. It was well known that impressions made upon the mind concerning the success of any given practice were liable to be erroneous until the account came to be cast up and the results shown in figures. In determining the safety to mother and child of the several methods of provoking labour, statistics were particularly valuable; and nothing appeared more conclusive of the advantage of one method over another than the 88 per cent. of children saved by Dr. Hamilton, who separated the membranes, but did not puncture them, as contrasted with the 45 per cent. of Dr. Merriman, and the still smaller per-centage of Dr. Lee, both of whom adopted the plan of puncturing the membranes. Of the various modes which had been suggested, Dr. Priestley had personally found the injection of tepid water into the cervix uteri the simplest and the best. It needed nothing more than a gum-elastic catheter, adapted to a Higginson's syringe, and the operation was almost painless, in most cases easily performed, and usually brought on labour in less than twelve hours. The water so injected had been said to be liable to separate the placenta, and one case had been published in which air had entered the uterine veins during the operation and caused the death of the patient; but it must be recollected that such alarming results were extremely rare, and probably might be entirely avoided by proper precautions. One disadvantage of injecting a large quantity of water into the uterus, according to Cohen's method, until the patient complained of a feeling of distension, had not been alluded to. By distending the lower segment of the uterus and altering the ovoid form of the organ the child was very likely to change its position and present preternaturally. Twice had Dr. Priestley witnessed this. In a case where he induced labour some time ago for Mr. Fergusson, of Nottinghill, the head distinctly presented when the water was injected, but when labour came on the child presented by the feet. Latterly he had taken the precaution to inject not more than four or six ounces of water, which was usually effective, and less likely to alter the presentation. The dilatation by caoutchouc bags might prove serviceable in certain cases, but under ordinary circumstances he was well satisfied with the injection of warm water.

Dr. Hall Davis remarked that, in connexion with the Royal Maternity Charity and other Institutions during many years, he had frequently been called upon, on account of various indications, to resort to the induction of premature labour, and had employed several of the methods which had been proposed. In the early part of his practice he adopted the original mode—that by the stilet, first performed in 1756 by Dr. Macaulay, the colleague of Dr. William Hunter. He (Dr. Davis) made a small aperture, so as to ensure a gradual escape of the liquor amnii. In several cases consecutively this plan was perfectly successful as to the mother, and the

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children also; but subsequently two cases came in succession, where the children were still-born, which it seemed to him was due to the pressure exerted on the body of the child in the absence of the liquor amnii to defend it. Since the occurrence of those cases he had never, except where profuse hæmorrhage had been the indication, resorted to the discharge of the waters for the induction of labour—as a first measure. It should be, he thought, a great object with Obstetricians to save the bag of liquor amnii for the labour, as being Nature's providential arrangement for safely dilating the genital passages, and at the same time for defending the child from dangerous pressure. His practice now, therefore, was to preserve the waters intact, if possible. He first, if practicable, proceeded by introducing the index finger gently through the os uteri, and upwards outside the membranes, as far as he could reach; he then swept around it, thus dislodging the mucous plug, and separating the membranes to a corresponding extent. He subsequently introduced a piece of soft sponge, previously oiled, as large as could be passed without much difficulty. Where the os uteri would not admit the finger, he commenced with a sponge-tent, supporting it with a piece of sponge at the top of the vaginal tube. He had found these to answer in most cases; in other instances he had resorted to the use of an elastic bougie, passed high up, about half way into the uterus, outside the membranes, previously drawing off the urine, and leaving it in for five or six hours, secured *in situ* by tapes, so far as to prevent its slipping out again. This he found to answer only in one recent case; labour came on in four hours. He had also employed, and with success, the method usually accredited to Dr. Cohen, of Hamburg, consisting of the injection of water into the uterine cavity. The elastic tube used for the purpose of conveying the fluid to its destination should be passed up cautiously; care must be taken not to rupture the membranes by too forcible injection of the water, to allow it free egress, and also to guard against the injection of air with the water, especially by keeping the end of the suction-tube well immersed in the water to be injected. As regards the induction of labour by the ergot of rye, he (Dr. Davis) could testify that it had the effect of inducing it, but, unfortunately, the children appeared to be destroyed too frequently under its influence. He must say that he was much pleased with Dr. Barnes's paper, and with his proposal of an elastic dilator, water being the medium, as a means of dilating the os uteri, and so of inducing labour. Any addition to the previous resources for the induction of labour, having for its object the saving of the liquor amnii for the useful offices it serves to perform in the act of parturition, must, he apprehended, be considered a great improvement in careful hands.

Dr. Tyler Smith was sure that great good would result from the paper and the discussion which had followed it. The subject itself was most important; and the intrinsic excellence of the paper, and the original proposals which had been made by the Author, would do much to attract the attention of the Profession to the induction of premature labour. In proper cases it was of the highest value, and its application in practice was still only in its infancy. What had taken place would no doubt lead to its more extended adoption. He did not think he should have found anyone holding a higher opinion of this operation than himself, but he could not quite agree with Dr. Barnes in placing it before the forceps. After the use of the forceps, he held the induction of premature delivery to be the most important and life-saving of all obstetric operations. He had tried most of the methods of proceeding which had been proposed, and for some years he looked upon the vaginal injections of Kiwisch (which he was the first to use in this country) as far better than puncture of the membranes or any other plan. For the last three or four years he had, however, used uterine injections, and had found them an improvement upon the method of Kiwisch. He had not known of any accident from the vaginal douche, except in a patient whose case had been communicated to him, and who was placed in a cold bath during the douche. In this instance death was caused by internal congestion and hæmorrhage. The weak point of the vaginal douche was, that sometimes labour was several days or even a week before it came on. The only death which he had known to follow the uterine douche or injection occurred from puerperal fever, and was not caused by the mode of producing labour. His plan had been to inject about half-a-pint of warm water, of the temperature of the blood, into the uterus, through a catheter or tube passed four or five inches into the uterus. The injection of the fluid should be gentle, care being taken not to inject air. He had never known the coming on of labour to be deferred as much as twelve hours from the time of using the injection, and generally it had commenced immediately. So far there seemed little to be desired. He had never known hæmorrhage to be produced by its use. He could not join in the light estimate which had been taken of statistics. These were, in his opinion, of high value, and their collection was one of the most useful objects of the Society. He regretted also to hear the light manner in which bold incisions into the cervix uteri to facilitate labour and ruptures of this organ, had been spoken of. He thought the cervix uteri entitled to greater respect; and he should certainly feel it a grave accident, if, at any time during labour, the cervix were lacerated so as to allow the head to pass through it suddenly. Any new method of inducing labour with safety and certainty would, he had no doubt, receive due attention. He should certainly try the ingenious instruments devised by Dr. Barnes, and should be very glad to find them an improvement upon the injection of the uterus. It might be necessary to caution the Profession, who would no doubt try the method of Dr. Barnes, against dilating the os and cervix too suddenly, so as to incur the risk of producing contusion or rupture of the lower part of the uterus, as the amount of fluid pressure which could be brought to bear was enormous. He considered that Dr. Barnes had earned the gratitude of the Society by the manner in which he had brought this most important subject before it.

Dr. Barnes, in reply, said, that if it was found that out of 1000 labours in England 5 women died, whilst 15 or 20 died abroad, that might justify the conclusion that English midwifery was more successful than foreign. But the moment we sought to extract pathological and therapeutical laws from the compilation of statistical tables, we were surrounded by so many complications and disturbing clauses as to render any conclusions unsafe. If in his bed-side observation he saw that by puncturing the membranes too early the child's life was imperilled by the head being driven against or through an imperfectly prepared cervix uteri, he was convinced of the error of the practice, and was in a position from which he could not be dislodged by the abstracted facts of statistical tables, which could not be subjected to cross-examination and verification. In reference to the method of inducing labour which he had brought forward, he disclaimed the idea of advocating it to the exclusion of others; he rather insisted upon the necessity of observing the three stages he had defined—preparation, provocation, acceleration; and pointed out that, by due observance of this principle and the proper application of the caoutchouc dilator to the cervix, and the improved method of turning, the induction of labour was no longer a matter of uncertainty as to time, but one completely within our control.

LEGAL INTELLIGENCE.

WILL-WITNESSING.

As Medical Practitioners are frequently asked to witness wills, a knowledge of this branch of law, therefore, becomes essential in such circumstances. The rule is very simple and clear, being found in a recent statute, which enacts, "That no will shall be valid unless it is in writing, and signed at the foot or end thereof by the testator, or by some other person in his presence and by his direction, and such signature shall be made or acknowledged by the testator in the presence of two or more witnesses, present at the same time, and such witnesses shall attest and subscribe the will in the presence of the testator; but no form of attestation shall be necessary." The construction of this enactment came under the consideration of the House of Lords on the 11th of March last, in the case of Hindmarsh *v.* Charlton, and in which both witnesses to the alleged will were Medical men. There the will was adjudged invalid, by reason of the non-observance of the statutory requirements. In the above case, the evidence showed that Mr. Wilson, of Gosforth, Surgeon, was in attendance upon the testator on the morning of the 17th December, 1857; that the testator then asked him to sign his will as a witness;

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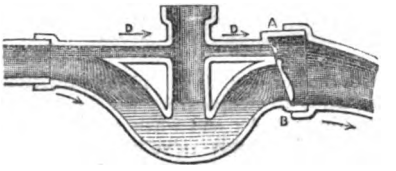
that the will was accordingly brought out in duplicate, and the testator, after looking at it, said, "This is my will." Mr. Wilson then wrote at the bottom on both papers, "Witness to the above will and testament and signature, Fred. Wm. Nap. Wilson." In the afternoon of the same day Dr. White, of Newcastle, saw the testator, in consultation with Mr. Wilson, when the latter suggested to the testator that he had better have another witness to his will. Dr. White then took the will, and asked the testator if that was his will, who said, "Yes, that is my will, and this is my signature." Dr. White now added his name to both papers, in the presence of the testator and of Mr. Wilson, thus, "David B. White, M.D." After Dr. White had signed, Mr. Wilson took the papers and re-touched his name by putting a cross on the "F," and also added the date to both wills, thus, "This 17th day of December, 1857," but he did not add his own signature, erroneously conceiving that adding the date was equal to his repetition of his signature as a witness to the will. After the testator's death, his next of kin alleged that he had died intestate. Whereupon, a trial was held before Mr. Justice Byles, at Durham, who told the jury that the alleged will was not attested and subscribed according to the statute. The case afterwards came before the Court of Probate, where the Judge also held that the will in question was not, according to the evidence, executed and attested in conformity with the statutory provisions. Against this decision an appeal was made to the House of Peers, where the Lord Chancellor, in giving judgment, observed:—"These are very distressing cases for judges to determine. I may honestly say that we have a strong inclination in our minds to support the validity of the will in dispute, which the parties *bona fide* made, as they believed, according to law, and where there is not the smallest suspicion in the circumstances of the case; but we must obey the directions of the Legislature, and we are not at liberty to introduce nice distinctions, which may bring about great uncertainty and confusion. Having heard the case argued on both sides, I am of opinion that the learned Judge of the Court below came to a right conclusion in holding this will was not made in accordance with the requirements of the Legislature. To make a valid subscription of a witness to a will, there must either be the name or some mark which is intended to represent the name; and the question in this case is, whether that which took place was a subscription of the witness whose subscription is in question or not? Now, on this occasion, the name is not written, nor do I think there was anything written that meant to represent the name. The horizontal stroke made by the witness was merely intended to perfect the letter 'F.' Can that be considered as amounting to a subscription? It was an acknowledgment by him of his former signature, written in the morning, but it is not a new subscription. It has been solemnly determined that an acknowledgment by a witness of the signature was not sufficient: and, therefore, I must advise your Lordships that the appeal be dismissed."

Medical Practitioners must, therefore, bear in mind this rule in law, that to make a valid subscription of a witness to a will, he must either write his name, or make some mark which is intended to represent the name, and that any deviation will not only occasion disappointment, but involve the parties in litigation and expense.

MR. LOVEGROVE'S PLAN FOR VENTILATING HOUSE-DRAINS.

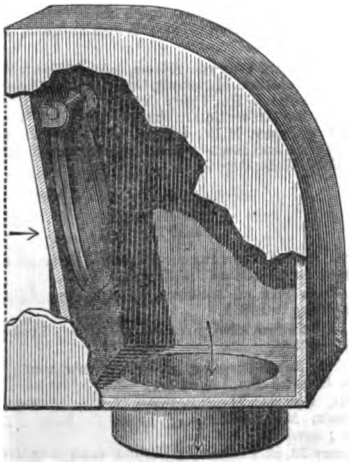
At the last meeting of the Metropolitan Association of Medical Officers of Health, the subject of the means of Entrance of Sewer Air into Houses was brought forward by Dr. Sanderson. He stated that, during nine months at least of the year, a current of foul air sets in from the sewers towards houses whose drains are not air-tight, depending on the circumstance that the density of the air in houses is inferior to that of the exterior atmosphere, and that this condition of itself was a powerful cause of the production of the utmost impurity of the air of our dwellings. Dr. Dundas Thomson pointed out the remarkable contrast between the atmospheres of sewers and those of inhabited dwellings of cities; for, while in the sewer air there was abundance of the germs of animal life, which, if collected by chemical means, can be carefully developed and examined, the air of our houses contains a small amount of animal life, but a large quantity of vegetable sporules diffused through inhabited rooms. These the speaker had carefully examined, and grown into plants for a series of months. The sewer air was strongly alkaline from the presence of ammonia,—a product of putridity,—while our household atmospheres were strongly acid from the presence of sulphurous acid,—a result of the combustion of our ordinary fuel and gas. This acid ingredient of the air which we were constantly breathing, particularly in winter, was no doubt injurious to our respiratory organs, and to our furniture; but it had one beneficial effect, that it might neutralise, in some degree, the prejudicial influence of the sewer air which undoubtedly did enter our houses, particularly where sanitary appliances were despised. Sulphurous acid, too, was a powerful deodoriser and disinfectant, and had the remarkable power of turning the oxygen of the air into ozone; in other words, of rendering the oxygen active instead of being neutral. He fully concurred in the opinion that it was a most difficult matter to prevent the sewer air from entering city dwellings, as it would be found that in any of the pipes connected with our drains and sewers the current towards our houses was so strong, that often a candle introduced into an aperture in the pipe would be immediately extinguished. Too much attention, therefore, could not be bestowed on the impervious nature of our drains, and the application of proper fixed traps, the bell-traps so much in use, especially in sinks, being a positive nuisance. Dr. Lankester spoke of the fearful condition of the drainage in some of the best houses in his district, in the basements of which there was a continual sewer odour. Dr. Druitt confirmed the views of the previous speakers as to the unwholesome gases and vapours which enter dwellings. Mr. Lovegrove, surveyor, of Hackney, stated some important facts respecting the temperature of sewers, and exhibited some admirable traps which he had contrived for drains and closets. The following figures may assist in the explanation of this mode of ventilating and trapping house drains:—

Fig. 1 shows a trap for the extremity of a house-drain. A



certain quantity of water always remains in the sunk portion; and in case this should fail through evaporation and disuse, there is a metal valve, B, to act as double security. Along the upper part of the trap runs an air-pipe, closed by a valve, A, opening *outwardly*. Through this valve the air of the drain escapes when water is poured down.

Fig. 2 shows an air-supply valve opening *inwards*, and



admitting air to the inside of the house-drain, and through it into the sewer by means of the former valve (A, Fig. 1),

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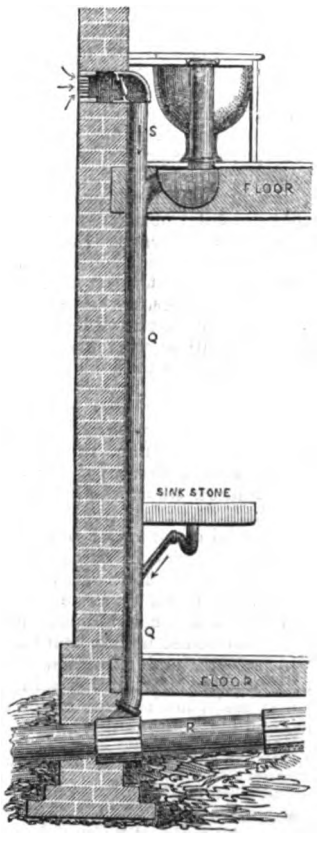
whenever the barometric pressure in the sewer is less than that of the atmosphere.

Fig. 3 shows the arrangement of the air-supply valve in



connexion with the house-drains; and the provision by which, whenever gas tends to escape from the house-drain, it goes into the sewer through A; and whenever it tends to enter, it can do so through the supply-valve in the direction indicated by the arrows.

MEDICAL NEWS.

APPOINTMENTS,

HENSMAN—ADAMS.—At the Annual Competitive Examination at the Westminster Hospital, for the Offices of House-Physician and House-Surgeon, the following successful Candidates were elected:—House Physician, Frank H. Hensman, Esq.; House-Surgeon, Thomas Rutherford Adams, Esq.

SHARPEY.—At the Court of Osborne House, Isle of Wight, April 16, present the Queen's Most Excellent Majesty in Council, Her Majesty was pleased, by and with the advice of Her Privy Council, in pursuance of the provision contained in the 4th section of the 21st and 22nd Victoria, chap. 90, to appoint Wm. Sharpey, M.D., to be a member of the General Council of Medical Education and Registration of the United Kingdom, in the place of Wm. Baly, M.D., deceased.

DEATHS.

BERNARD.—April 15, at Mornington-crescent, Hampstead-road, John Celestin Bernard, of the Island of Trinidad, M.D.

FOX.—April 17, Noah Fox, of Melbourne-street, Mansfield-road, Nottingham, L.F.P.S. Glasg.; L.S.A.

GROER.—April 18, William Groer, of West Derby, Liverpool, M.R.C.S. Eng.; L.S.A., aged 51.

GREGORY.—April 18, John Gregory, of Bishopwearmouth, Durham, Fell. and M. R.C.S. Eng.; L.S.A., aged 40.

LOVE.—April 21, George Heginbotham Love, of Manor Villa, New Wanstead, Essex, M.D. Erlangen; L.R.C.P. Edin.; L.R.C.S. Edin.; M.R.C.S. Eng.; aged 38.

MOTTLEY.—January 30, at Yandoit, Australia, George Mottley, formerly of Shanghai, China, aged 45.

YOUNG.—April 19. Thomas Young, of Ramsay, Isle of Man, formerly of Lima, M.D. Edin.; L.R.C.S. Edin.

ROYAL COLLEGE OF SURGEONS (a).—The following gentlemen were elected at meetings on the 11th, 12th, 17th, and 19th, inst.:—

Anderson, H. B., West India-road, Poplar
Barham, H. F. H., Maidstone, Kent
Bazeley, W., Plymouth
Beck, W. R., Keighley, Yorkshire
Belcher, J. S., London
Bell, J. V., Rochester
Benny, M., Denny, Stirlingshire
Bevan, T. K., Carmarthen
Bird, W. Tarporley, Cheshire
Blackett, G. P., Durham
Brook, C., Lincoln
Brown, A. B., Notting-hill
Brown, F. W., Uppingham, Rutland
Brown, J. W., Wymeswold, Loughborough
Caldwell, S. J. B., London
Capper, J., Liverpool
Carter, E. H., Billericay, Essex
Collins, H., Wincanton, Somerset
Cumming, S. M'D., Bilston
Curme, Decimus, Dorchester
Date, William, Cirencester
Davy, H., Penzance, Cornwall
Dudfield, T. O., Gloucester
Earle, J. L., Nether Stowey, Somerset
Edwards, W., Bampton, Devon
Evans, D. N., Denbigh
Ferris, J. A., Calcutta
Fielden, Samuel, Bishop Auckland, Durham
Finch, H., Newnham Crofts, near Cambridge
Foster, Philip, Leeds
Fowler, J., Winterton, Lincolnshire
Gardner, S. C. T., Highgate
George, F., Morlen-place, Pimlico
Gilbert, E. G., Bilston, Staffordshire
Goldsmith, G. P., Brompton
Green, T. F. H., Burnley, Lancashire
Greenwell, B. Queen's-terrace, St. John's-wood
Gregory, John, Manchester
Griffith, G., Pointz Castle, Pembroke
Harding, J. R., Welbeck-street, Cavendish-square
Haslewood, J. A., Darlington
Hatchett, J., Birmingham
Hensman, F. H., Kimbolton, Hunts
Hodges, B., Watton, Herts
Hodson, J. C., London
Hooper, J. H., Upton Warren, Worcester
Humphreys, M. H, Markham-sq., Chelsea
Hurlstone, M. O., Cheltenham
Hutchinson, J. H., Catterick, Yorkshire
Inman, W., Sedbergh, Yorkshire
Jackson, J., Hobart Town, Tasmania
Langworthy, W. P., Modbury, Devon
Ling, W. S., Gorleston, Suffolk
Lyons, W., Madras
Machin, E. S., Erdington, near Birmingham
Matthews, W. Walsall, Staffordshire
Milburne, T. D., Ryton, Newcastle
Morgans, J., Cross-hill, Nebo, Aberystwith
Overton, A., Coventry
Owen, O., Anglesea
Owen, R. J., Leamington
Payne, W., Wallingford, Berkshire
Phillips, G. B., Clapham
*Powel, William, Dalston (b)
Schofield, F., L.S.A., Saddleworth, Manchester
Sheppee, W. H., Bedford
Smart, J. N., Bedminster, Bristol
*Smith, T. S., Warrington
Southey, A. J., Frognal, Hampstead
Spencer, W. H., Preston, Lancashire
Spyers, T. C., Weybridge
Strutt, G. H., Burton-on-Trent
Sutcliffe, H., Heptonstall, York.
Sutton, F. J., Martin, Lincolnshire
Thomas, D. B., Newcastle Emlyn
Waller, C. B., Finsbury-square
Watson, W. Ledberg, Yorkshire
Waylen, C. W., Haverstock-hill
Whitmarsh, W. M., Chippenham, Wilts.
Williams, W. G., Haverfordwest
Williams, S. W. D., Gloucester
Wilson, H. O., Bristol
Woodman, W. B., Stonehouse, Gloucestershire
Wright, T. P., Tiverton, Devon
Wright, A., Mount Sorrel, Leicestershire
Wynter, D. R., Kensington
Yeo, I. B., Stonehouse, Devon

The following gentlemen passed their Primary Examinations in Anatomy and Physiology at a meeting of the Court of Examiners on the 23d and 24th inst., and, when eligible, will be admitted to the Pass Examination:—

Barker, E. R., Dublin
Bowen, Josiah A., Liverpool
Cann, Thomas Martyn
Clarkson, F. R., Leeds
Coates, Frederick William
Coles, R. W., Manchester
Compson, John Charles
Dalgliesh, Jonathan, Newcastle
Dawson, Edward, Manchester
Deane, Henry William
Dixon, George, Edinburgh
Dudley, Edward, Aberdeen
Evans, William Lewis
Fagge, Frederick Thomas
Farwell, Richard
Forrman, Samuel George
Fox, E. L. H.
Gardner, J. F. W.
Gargory, Caleb
Grove, William Richard
Hanks, William, Liverpool
Hawthorne, John, Newcastle
Haynes, Stanley Lewis
Hughes, David Walkin
Jenner, William
Jones, William
Land, Robert Turner
Lattey, James
Leigh, Thomas
Lloyd, N. H.
Long, Arthur
Lyman, John
Lynch, Jordan Roche
Makinson, William, Edinburgh
Mann, J. D., Manchester
Martin, Adam Rae
Mason, John Wallis
Morgan, William John
Newton, Henry W., Newcastle
Oglesby, R. P., Leeds
Osbaldiston, Lyttleton F.
Patrick, S. A., Manchester
Potter, John Baptiste
Probyn, John Sutherland
Purnell, Richard
Rayner, William
Renton, William Matthew
Rushton, J. L., Manchester
Seaman, Albert Baird
Smirthwaite, Sagar Veevers
Smith, Charles
Shepherd, Charles Dunbar
Squires, William Westbrooke
Turner, Arthur Newman
Wallace, John
Warn, Reuben Thomas
Watmough, William
Weston, George Blyth, Edinburgh.

ROYAL COLLEGE OF SURGEONS OF EDINBURGH.—The following gentlemen having passed the Examinations of this College during the recent sittings of the Examiners, were admitted Licentiates of the College on the 23rd inst.:—

Anderson, James, Perthshire
Bantock, George Granville, Sutherlandshire

(a) This College is the only one which does not send lists of New Members to the Medical Journals.—Hence frequent mistakes, for which the Journals are not responsible.

(b) Those gentlemen with an asterisk prefixed to their names have also passed the Preliminary Examination for the Fellowship of the College.

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Hare, Richard William, Geneva
Kennedy, William, Aberdeenshire
Moorhead, Robert Lowry, Smithlow
Read, Herbert Huntington, Nova Scotia.
Simpson, John, Inverness

APOTHECARIES' HALL. — Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise on Thursday, April 18 :—

Baker William Morrant, Andover, Hants
Barker, Elijah, Sheffield
Cornbill, John, Stow-on-the-Wold, Gloucestershire
Evans, Thomas Melancthon, St. Neot's, Hunts.
Fowler, James, Winterton, Lincolnshire
Harvey, John, Birmingham
Payne, William, Wallingford, Berks.

The under-mentioned gentleman also on the same day passed his First Examination :—

Dodd, Edward, North Stoke, Oxon.

PROFESSOR WAGNER, of Königsberg, who distinguished himself particularly as one of the Surgeons of the Prussian army during the Schleswig-Holstein campaign, and is well known by his book on the Healing Process after the Resection of Joints, was entertained at mess by the Army Medical Officers at Fort Pitt on the 22nd instant. Several naval and other officers of the garrison were invited to meet him.

MEDICAL DEPARTMEMT OF THE SOUTHERN ARMY OF THE UNITED STATES.—It has been decided to appoint a Surgeon-General, with a salary of 3000 dollars, quarters, and fuel. The monthly pay of Surgeons of ten years' service in that grade is to be 200 dollars, and a Surgeon of less time service, 162 dollars ; Assistant-Surgeons of ten years' service, 150 dollars, and of five years' service, 130 dollars. Four assistants of less than five years' service are to receive 110 dollars.

MR. HUBBARD'S COMMITTEE ON INCOME-TAX AND THE MEDICAL PROFESSION.—We understand that the petition about to be presented to Parliament by the National Medical Registration Association, has received the cordial approbation of the Profession in London, and, through the Local Registration Associations, in the country. It is expected that the Income-tax Committee will shortly bring their sittings to a close, and we trust, for the interests of the Profession, that the evidence which will be given as to the undue pressure of the tax upon the incomes of our Medical brethren, will have weight with the Committee in framing their report.

CONSANGUINEOUS MARRIAGES.—The following summary as presented in Professor Morris's report in the *American Medical Times*, conveys a kind of practical instruction which every family Physician should feel it his duty to enforce by Professional counsel :—

Class of Relationship.	No. of Families.	No. of Children.	Perfect.	Defective.
1. First Cousins	630	2911	955	1956
2. Second Cousins	120	626	360	266
3. Third Cousins	13	71	42	29
4. Double Cousins	27	154	21	133
5. Cousins, the Offspring of Cousins ..	61	187	64	123
6. Uncle and Aunt, Nephew and Niece	12	53	10	43
7. Incestuous	10 cases.	31	1	30
Total	863 + 10	4013	1453	2580

ADVERTISEMENTS FOR THE SALE OF VACCINE VIRUS.—We copy these advertisements from the *American Medical Times*, as exhibiting a Transatlantic peculiarity :—"VACCINE VIRUS 'OF ALL KINDS,' perfectly pure and most reliable, used by the leading Physicians of New York, and put up in the best form for transmission to any part of the world. Prices—single crust, one dollar ; seven crusts, five dollars ; single tube, two dollars ; three tubes, five dollars ; A single charge of eighth-day lymph on pointed quills, or otherwise, twenty cents ; twelve charges, one dollar. N.B.—A *new stock* of vaccine can hereafter be furnished to all who wish it. At present, March 16, *one remove from the cow*." "VACCINE VIRUS FROM THE COW, obtained by vaccinating kine. Two quills, one dollar. Warranted once. Address, Ephraim Cutter, M.D., Woburn, Mass."

HUXLEY ON THE EARLIEST STAGES OF THE DEVELOPMENT OF ANIMALS.—Harvey, in his "Exercitationes de Generatione Animalium," demonstrated with perfect clearness, firstly, that the chick is developed from the cicatricula, and not, as had been supposed, from the chalazæ, or other parts ; and, secondly, that the process of development is an "epigenesis," or gradual addition of new parts to those already formed. It has been ascertained since that the ovum of every animal primarily consists of a germinal vesicle, containing its so-called spot, and enclosed within a yelk, or vitellus ; and that, in the great majority of cases, the first changes which follow upon impregnation consist in the disappearance of the germinal vesicle as such, and the regular division of the yelk into smaller and smaller masses, out of which, in one way or another, the blastoderm of which the embryo is a modification, arises. Such yelk division, however, has not yet been observed among the higher *Annulosa*, nor in certain *Entozoa*, nor does it occur in *Pyrosoma*. So much being definitely ascertained, there is yet one question upon which embryologists are widely divided, viz. What is the relation between the germinal vesicle and the cells, or structural elements, of which the blastoderm is composed? Three answers have been given to this question :—1. According to the late Dr. Barry, the blastoderm arises from a modification of the germinal vesicle, in a manner particularly described by him. No other observer, however, has been able to discover a trace of this process ; and it may be regarded as tolerably certain that its describer was mistaken. 2. According to Bischoff, Kölliker, and the majority of embryologists, the germinal vesicle and its contents disappear, and have no direct connexion with the cells of the blastoderm. 3. According to observations of the late Johannes Müller, of Gegenbaur and others, the germinal vesicle may give rise directly, by division, to the cells of the blastoderm. The study of the development of the embryo of *Pyrosoma* yields results in close conformity with the last view. The ovum of this animal is, in fact, composed, at first, like all others, of germinal vesicle, germinal spot, and vitellus ; but, in the course of development, the vitellus disappears, probably becoming liquefied, and the germinal vesicle is laid bare, so that it becomes comparatively easy to watch the subsequent changes in its interior. These consist in the deposit of a somewhat opaque matter and the division of the germinal spot, so as to give rise to the endoplasts, or "nuclei" of the blastoderm, which is thus primarily formed within the interior of the germinal vesicle.

VITAL STATISTICS OF LONDON.

Week ending Saturday, April 20, 1861.

BIRTHS.

Births of Boys, 1007 ; Girls, 954 ; Total, 1961.
Average of 10 corresponding weeks, 1851–60, 1713·1.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	639	571	1210
Average of the ten years 1851–60	574·3	539 5	1114·3
Average corrected to increased population..	..	..	1225
Deaths of people above 90	..	..	7
Deaths in 15 General Hospitals	46	27	73

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1851.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	376,427	1	4	2	..	10	4	3
North ..	490,396	1	10	5	2	22	4	2
Central ..	393,256	..	2	4	3	9	6	3
East	485,522	2	2	6	2	15	5	2
South ..	616,635	..	..	5	5	27	6	3
Total.. ..	2,362,236	4	18	22	12	83	25	13

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Medical Times and Gazette.

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NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Erratum.—Page 423, col. 2, line 22 from bottom, *for* "ozonised," *read* "organised."

Dr. Druitt's letter "Dr. Robert Lee and Craniotomy," shall appear next week.

Mr. Wills.—The Asylum for Idiots is at Earlswood, near Redhill.

X. X. X.—1. West on the Diseases of Children. 2. Husband's Tract on Vaccination.

Dr. Macloughlin's note shall appear next week.

Dr. Wilde's letter on "Will-Making Doctors" is unavoidably delayed until next week.

A Country Subscriber.—No lunatic can be lawfully received into a private house without a licence. Application for a licence must be made to the Lunacy Commissioners.

A Young Student will find all the information he needs in our last Students' Number.

Dr. Cameron's important letter on the Fever at Liverpool is unavoidably delayed until next week. *Dr. Williams's* account of the case of the bath attendant shall appear at the same time.

Scotus, Dr. Craig, and others, who have written to us respecting the letter of one of our German Correspondents, on "Revivalism in Prussia," may remember that we have repeatedly stated that we are not answerable for the opinions of our Correspondents. A Medical Journal is not the place to discuss the religious aspects of any question.

At the moment of going to press we receive an important letter from Malta, describing the state of the frigate which conveyed the crew of the Liverpool typhus-ship home. This letter shall appear next week.

Medical Practice in the Channel Islands.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In the last Number of the *Medical Times and Gazette* I observe that one of the Surgeons to the Guernsey Militia received a circular from Dr. F. Hawkins, Registrar under the New Medical Act, informing him "that by the 38th Section of that Act no person can held an appointment as Physician, Surgeon, or other Medical Officer, either in the Military or Naval Services, unless he has been registered under this Act." I believe neither Jersey, Guernsey, nor the other Channel Islands are named in the said Act, which appears to have been a great omission on the part of its framers; it being generally considered in those delightful spots by the members of the Medical Profession and others, that the said Act does not in the least affect them, and which has consequently caused many with bought foreign diplomas on their own *ipse dixit* to practise, particularly in the first-named island, which, had the Act been intended to have force in the Channel Islands, would have prevented numbers of foreigners benefitting at the expense of the duly-qualified native Professional *confrères* established there. I trust the oversight may yet be remedied and place everyone in his true position.

I am, &c.

April 23. A Jersey Man, L.S.A.

The "London Surgical Home."

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—We, the undersigned Medical Officers of "The London Surgical Home," request that you will allow the day of operation at this Hospital to be inserted in your Journal under the head of "Operation days at the Hospitals,"—viz. Thursdays, 2 p.m. We have reason to believe that this notice would be highly acceptable to many of your readers and the Members of the Profession generally.

We are, &c.

T. Hall Davis, M.D.
J. B. Brown.
Philip H. Harper.
Wm. F. Wratislaw, M.R.C.S., &c.
Henry W. Hubbard, M.R.C.S., &c.
April 22. Geo. Spencer, M.R.C.S., & L.S.A.

Widows and Orphans.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In your Journal of the 13th inst. there is an article relating to the "Society for the Relief of Widows and Orphans of Medical Men in London and its Vicinity," and I find that, according to its rules, only Qualified Members of the Profession in London and its vicinity are eligible as Members of this Society.

As I am thus debarred from the privilege of joining this Society, and am not aware that any similar one exists in Scotland or elsewhere within my reach, may I ask whether there is any Society of this kind to which I may possibly be admitted?

I am, &c.

Kilryth, North Britain, April 22. Delta.

COMMUNICATIONS have been received from:—

Professor Laycock; Mr. Le Gros Clark; Dr. Risdon Bennett; Dr. Wilde, Dublin; Dr. Whitehead, Manchester; Dr. Anderson, Glasgow; Registrar-General; Dr. M. Thomson; Dr. McWilliam; Dr. Druitt; Mr. Wyatt; Dr. Graily Hewitt; Dr. Roberts, Manchester; Mr. Rivers; Dr. Kidd; Mr. Copney; Mr. Ellison; Mr. Robertson; Staff-Surgeon Hunter; Dr. Macloughlin; Mr. Wills; Mr. Moncrieff; Mr. Richards; Mr. Norton Shaw; Mr. F. Wilson; Mr. J. A. Bowen, and Dr. Bains.

APPOINTMENTS FOR THE WEEK.

April 27. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

Royal Institution, 3 p.m. Max Müller, Esq., "On the Science of Language."

29. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

Royal College of Physicians, 8½ p.m. Dr. Beale's "Lecture on the Structure of the Tissues of the Human Body."

Medical Society of London, 8½ p.m. Clinical Discussion.

30. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

Royal Institution, 3 p.m. Mr. John Hullah "On the History of Modern Music."

May 1. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

Royal Institution, 2 p.m. Annual Meeting.

Obstetrical Society of London, 8 p.m. Dr. Priestley "On the Treatment of Cases of Abortion in which the Placenta and Membranes are Retained."

2. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.

Royal Institution, 3 p.m. Mr. Pengelly "On the Devonian Age of the World."

Harvеian Society of London, 8 p.m. Mr. James B. Lane "On Some Diseases of the Rectum."

3. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

Royal Institution, 8 p.m. Professor Faraday "On De la Rue's Eclipse Results."

Western Medical and Surgical Society of London. Council Meeting, 7 p.m. Annual Meeting; Election of Officers for 1861-62; Reports of Council and Auditors, 8 p.m.

EXPECTED OPERATIONS.

King's College Hospital.—The following Operations will be performed this day (Saturday) at 2 o'clock:—

By Mr. Fergusson—Resection of Hip-joint; Resection of Knee-joint; Resection of Elbow-joint; for Nævus, two cases; Tracheotomy.

By Mr. Hulke—For Necrosis of Humerus.

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ORIGINAL LECTURES.

CLINICAL LECTURES

DELIVERED AT

ST. THOMAS'S HOSPITAL IN 1861.

By F. LE GROS CLARK, F.R.C.S.

Surgeon to the Hospital.

LECTURE VIII.

DISEASES OF JOINTS.

GENTLEMEN,—The diseases of the joints, on which I propose to make some observations to-day, are as varied as the textures which compose these parts, and often complicated from the existence of morbid changes in two or more of these component textures at the same time. Perhaps there are few diseases more often treated on empirical principles; that is, without an accurate knowledge of the morbid changes, and a correct appreciation of their association with symptoms; and I think that is chiefly due to the difficulties which surround the diagnosis of advanced and complicated cases. And, indeed, when we are dependent on the history afforded by the patient, in such instances, it is not matter of surprise that even the experienced Surgeon should sometimes be at a loss to identify the texture or part in which disease first commenced. With patience and care, however, this may be generally ascertained if we allow the patient to tell his own tale, and do not encourage deception by leading questions.

The cases by which I shall illustrate my remarks are exclusively those in which the knee-joint was the seat of disease:—

Case 1.—J. K., a gardener, aged 26, admitted on January 9, 1861. Six weeks since he jarred his knee by a fall. This was followed by acute pain beneath the patella, and the knee became swollen. He appears to have neglected it till he applied at the Hospital for relief. The joint was then puffy, and the capsule distended, especially under the extensor muscles. Some tenderness on pressure, but not excessive; motion tolerably free, and accompanied chiefly by pricking pain. Health not much affected. The limb was placed, extended, on a Liston splint, and the joint was covered with mild mercurial ointment. This was subsequently changed, when pressure could be borne, for uniform support with strapping and roller, and in the beginning of February he left the Hospital well.

Case 2.—T. R., aged 45, coal-whipper, of drunken habits, admitted March 16, 1861. Has been the subject of rheumatism on several occasions. Received a severe blow on the knee a few days since. The joint speedily became swollen and very tender. On admission the thigh and leg were œdematous, and the synovial capsule of the knee much distended, especially under the extensor muscles. Urine high-coloured, and depositing a red sediment; tongue furred, general tremor, but no febrile excitement. An active purge was first administered, and then an opiate at night and a moderate allowance of gin. Warm water dressing to be applied, and the limb to be kept at rest on a Liston splint. He was much relieved by this treatment. The general swelling and synovial distension subsided. Subsequently some colchicum wine was prescribed, with marked benefit, and the patient soon afterwards left the Hospital quite well.

Case 3.—A. M., aged 18, linendraper's assistant, admitted February 21, 1860. Ill three days: without apparent cause, the left knee was attacked with acute pain and swelling. The synovial capsule was distended with fluid, and much distorted in appearance; very tender to the touch. Limb semiflexed. Much febrile excitement. It appears he had suffered from abscess on the inner side of the head of the tibia when a child, but the motion of the joint was not impaired before the present attack. The treatment in this case consisted in repeated leeching, with warm applications, and morphia at night; moderate diet, and an occasional purgative. The limb was kept almost straight on a Liston splint. The progress of the patient was very slow and unsatisfactory; and in the middle of April an abscess pointed on the outer side of the joint, which was opened. In June he left for Margate, with the knee stiff, but no longer discharging. It was not till shortly before he left that it was discovered accidentally that he was the subject of gonorrhœa, which still continued, and for which appropriate medicines were prescribed. Latterly, support had been afforded to the joint, by enveloping it in strapping, over mild mercurial dressing.

Case 4.—E. F., a married woman of spare habits, aged 30, was admitted on March 13, 1861. About six weeks previously her left hand and both knees became swollen and tender without assignable cause; she had never suffered from rheumatism or gout. Very speedily the hand and one knee got well, but the right knee became more swollen. It was leeched and fomented. On admission the whole joint was much distended, especially in the inner side and under the extensor muscles; limb semiflexed, and great pain occasioned by attempting to extend it. The leg was placed in a splint, and warm applications were applied. It should be remarked thaat this patient stated that her urine was very highly coloured and irritating when the attack first came on. In two or three days the rest had the desired effect of relieving the pain, and the swelling was somewhat diminished; the limb was then in good position. The chief point of tenderness being over the inner condyle, the blistering liquid was applied to this part. A nutritious diet was prescribed, as this patient seemed feeble and ill-nourished. She is gradually, though but slowly, improving.

Case 5.—G. R., aged 27, a labourer, was admitted on March 16, 1861. Five years since he was the subject of painful swelling of the right knee, but without derangement of health. This was subdued partly by blisters and leeches. A year subsequently he was confined with a severe injury to the ankle-joint, whilst the knee was still tender. The fixed position of the limb, which was maintained for some time, was followed by anchylosis of the ankle, and very limited motion of the knee was left. At the date of his admission the knee was considerably swollen and nearly fixed in a straight position; pain on pressing the patella, and fluctuation on either side; pressure of the articular surfaces together also productive of pain. A maxa, made with caustic potash, was opened on either side of the patilla, and some iodide of potassium ordered. Under this treatment, combined with a nutritious diet and strict rest, he is slowly recovering.

Case 6.—R. A., aged 24, a delicate-looking young woman, in service, was admitted on February 12, 1861. Had been in good health until, between three and four months ago, she became the subject of severe pain, with swelling, in several of her joints, consequent on sleeping and working in a new and damp house in the country. The attack was transient, with the exception of that in the left knee, which became more swollen and painful. This joint had been blistered and had iodine applied without any benefit; and, having been left to assume its own position, the leg and thigh were fixed at an acute angle in relation to each other. When admitted she had the aspect of a person worn by acute suffering. The knee was somewhat swollen, and the whole joint very tender to the touch. Pressure on the patella caused extreme pain, and she could not bear an effort which was made to place the limb on a splint. A generous diet was ordered, with an anodyne to relieve pain and procure sleep, and soothing applications to the joints.

During the three weeks succeeding her admission there was no abatement of her sufferings; she complained of spasmodic startings of the limb, and sharp lancinating pains in the joint; tenderness undiminished, pulse quick and irritable, and general condition betokening want of power; position of the limb not improved. There was a circumscribed fluctuating swelling on the outer side of the joint, which, when opened, yielded no pus. Under these circumstances it was decided to excise the articular surfaces of the joint, which was done in the usual way, by raising the patella. There was ulceration of cartilage, with caries of the cancellous structure of the subjacent bone of the patella, tibia, and femur, but no appreciable quantity of pus in the joint. The bones, especially the femur, at the seat of section, were very vascular. The limb was extended and placed in a Liston splint.

The constitutional disturbance and local inflammation, consequent on the operation, soon subsided, and the greater part of the line of incision healed kindly. On the ninth day it was requisite to make a counter opening on the outside of

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the joint, to evacuate some pus which had accumulated in this position; after this the patient expressed herself free from pain. She recovered her appetite, and slept well, and looked cheerful, and promises a satisfactory recovery. The position of the limb is good.

Case 7.—J. L., aged 7, admitted in January, 1861. He was kicked three weeks before on the knee, and has been suffering more or less ever since. There was tenderness over the joint, with some distension of the synovial capsule. The limb was placed in a Liston splint, and soothing applications were employed, followed by tincture of iodine, to the surface of the joint. In a fortnight or three weeks, two or three small abscesses opened spontaneously close to and over the patella; the tenderness and swelling of the capsule subsided simultaneously, leaving only some fulness, with a firm, resisting feel beneath the extensor muscles close to the patella. The sinuous openings were laid open, as they were found to communicate, and then speedily healed. Presented well.

Case 8.—E. H., aged 17, living at home, was admitted February 27, 1861. After scouring some floors she was attacked with pain and swelling of the right knee, three days before her admission. When first seen the knee was generally puffy and tender, and a blister was ordered, with some relief. Subsequently the swelling became more confined to the outer side, and soothing applications were employed; there was then some constitutional disturbance. Eight days after her admission there was distinct fluctuation, extending over the outer condyle of the femur, the outer half of the head of the tibia, and half way over the patella. There was no perceptible communication between the fluctuation of this swelling, and the opposite side of the joint. A free incision was made, and a large quantity of pus evacuated, with the effect of immediately restoring the symmetry of the joint, and the patient made a good recovery,

Case 9.—H. O., aged 26, in service, was admitted on December 26, 1860. She was the subject of acute inflammation of the surface of the whole knee, accompanied by much swelling, and supposed at first to be erysipelatous. There was much suffering and febrile excitement. Careful examination showed that the primary seat of this acute inflammatory attack was the bursa over the patella, which soon presented a circumscribed fluctuating prominence, limited to the region of the patella, and having no communication with the synovial capsule of the joint. A free opening was made and pus evacuated. The cavity was gradually filled with granulations, and the patient left the Hospital well in two or three weeks afterwards.

The foregoing cases illustrate many points of interest associated with joints generally; but I propose to limit my observations in the present Lecture to the knee joint, and shall avail myself of some future opportunity to speak of others.

It is necessary to bear in mind how many tissues enter into the composition of this important joint. There are ligaments inside and outside, an aponeurotic capsule, an extensive surface of cartilage, and the largest synovial membrane of the body. The expanded extremities of the bones imply the presence of much cancellous structure near the joint, and the patella consists almost exclusively of this texture. Further, the extension of the synovial membrane beyond the cartilaginous surface leaves it much exposed to external influences, especially around the patella.

The first general principle to be insisted on, whatever be the texture affected, or however the disease may have commenced, is rest, absolute rest. I do not mean by this, merely placing the limb in an easy position, or leaving the patient to do so; this mistaken kindness is often most prejudicial in its consequences; and we have no lack of exemplifications of this in Hospital Practice. Absolute immobility in a suitable position, then, is of primary importance. A splint which extends from the tuberosity of the ischium to the foot is the best adapted for this purpose: it should be well-padded and supplied with a foot piece, as well as an extending screw beneath the ham. The best position, where practicable, is nearly straight; but in many instances this cannot be obtained at once, where the case has been previously neglected; and then extension should be gradually made, as the patient can bear it, by means of the long screw.

Why should the knee naturally assume, in most cases, a bent position, and remain fixed thus? Some interesting experiments have been performed to show that distension of the synovial capsule produces this effect. But I have certainly seen it where such mechanical cause could not account for it, as, for instance, in Case 6. Tension of the ligaments cannot account for it, as the straight or bent position does not make much difference in this respect. When the limb is flexed, the cartilaginous surfaces of the femur and tibia do not touch each other over so large a surface, but the patella is more closely in contact with the former. On the whole, I am disposed to attribute it chiefly to muscular spasm—reflex muscular action excited by the local irritation; and the preponderance of power being with the flexors, the bent position is the consequence. If you feel the hamstring muscles in such cases you find them tense, and they are excited to increased action on the slightest attempt to oppose them. Forced and sudden extension has been in some cases resorted to: but I think this a very dangerous practice, unless it be in very exceptional cases.

As regards constitutional treatment, I may speak of such cases as I have narrated, collectively. There are very few instances which admit, except in the early and acute inflammatory stage, of depletion. Generally, indeed, a liberal diet and tonics are required as soon as this first stage has subsided, and in many cases the general depression demands such treatment from the first, combined, perhaps, with an active purge. I cannot say that I have much confidence in specific medicines, except where the joint-disease is traceable to a specific origin, as rheumatism or syphilis. In Case 2, colchicum was given with decided benefit; in Case 3, the gonorrhœa was treated, but too late to be of essential service. I do not give mercury, except in alterative doses; for I have not observed the good effects of its specific action ascribed to it by some Surgeons; and, as I have remarked, there are few patients who are the subjects of disease in or near so large a joint as the knee, who can bear the depressing influence of this powerful agent. In the chronic form of articular disease, where the cartilage is involved, as exemplified by Case 5, I have prescribed with advantage the iodide of potassium, in two or three grain doses twice a-day. Of course the general state of health of a patient should be carefully investigated; and I have found the condition of the urinary secretion an important guide, as in Cases 2 and 4.

In the first four cases the synovial membrane was the seat of the disease. Inflammation of this texture may generally be traced to some general or local cause. The gouty or rheumatic diathesis, shown by excess of the lithates in the urine, and gonorrhœa are amongst the general causes exemplified in the foregoing cases. Of local causes, acting alone or conjointly, cold is, perhaps, the most common; but mechanical injury is, as the foregoing cases prove, not unfrequent. It may be a question whether the synovial membrane is usually the primary seat of inflammation where injury is the cause. Probably the fibrous tissues around the joint may be strained, contused, or lacerated, and synovitis, from contiguity of texture, may result. In the boy (Case 7) this was evidently the case; for though the synovial membrane was in the first instance affected, superficial suppuration showed that the chief injury was external to the joint. Inflammatory attacks of the synovial capsule are readily recognised by the form of the joint, and by the tenderness which exists when it is pressed at its most exposed points, between the ligaments. The swelling distends the capsule on either side of the patella, and under the extensor muscles, and is dependent on inordinate secretion of synovia. When the attack is very acute, and at a later stage, this is replaced by a more solid effusion and even subsequent suppuration, as in a boy now under my care, with a contused wound, communicating with the joint: or ulceration may follow, involving the cartilage secondarily, and thus establish, perhaps, an incurable disease of the joint. Further extension of disease from the cancellous structure, through the cartilage, may ultimately involve the synovial membrane in destructive disease, where the products of inflammation are poured into its cavity; I believe Case 6 to be one of this character. It is remarkable how unaffected the synovial membrane may remain in cases of this class, until perforation of the cartilage allows of the invasion of the joint by the inflammatory products.

The treatment, locally, of synovitis of the knee is simple. Some leeches, with fomentation and poultice, in the first stage; followed by the application of blistering fluid over the exposed parts of the capsule, or soothing applications, are generally sufficient. In the more chronic form much trouble

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is often experienced in restoring the joint to a healthy condition. The local application of iodine or mercury and firm support are most efficacious. From what I have seen of the injection of iodine into such knee-joints, I cannot say I am much encouraged to recommend its adoption, though it is remarkable with what impunity this operation may, in some instances, be performed: it affords an illustration of what I pointed out to you on a former occasion when advocating the opening of the sac in strangulated hernia; viz., that this class of membranes (the serous and the synovial) when altered by diseased action, do not resent intrusion or violence, in the same way or to the same extent as when healthy.

I may remark that, in Case 2, the subject of the attack being of intemperate habits, I was afraid to leech the knee, or even to apply a blister; but I gave him opium and gin.

Lastly, in Cases 3 and 5, we have illustrations of synovitis terminating in the former in a stiff joint, and in the latter followed, I believe, by disease of cartilage, as shown by the pain experienced on pressing the articular surfaces together.

I have said that disorganisation of the knee—as, indeed, of any joint—may result as a sequence from acute synovitis. This is frequently, but not necessarily, the consequence of neglect of the disease in its early stage; but sometimes this destructive effect occurs very rapidly, suppuration and ulceration following speedily, as we notice in other tissues likewise.

Cases 3 and 5 exemplify extension of disease from the synovial membrane to the cartilage. In the former the disease was protracted, and suppuration followed; indeed, at one time I contemplated the necessity of excising the joint. In the latter I am using moxas, which form of counter-irritation is very valuable in this chronic affection of the cartilage. The amount of pain in ulceration of cartilage varies a good deal, but is usually acute. I said that when the synovial membrane is the seat of inflammation the most exposed parts of the capsule are the most tender. But in ulceration of cartilage, which may or may not be attended with distension of the joint, it is by pressure or friction of the articular surfaces that most pain is occasioned. Thus, if you press ever so gently on the patella, or jar the joint by a shock on the heel, the suffering is very acute. And I may here remark, that the pain occasioned by inflamed ligaments is elicited in a very different way—viz., by making extension, and thus putting them on the stretch. I think this distinction a valuable one in determining the seat of the disease.

I will not detain you by discussing the moot question, whether cartilage may be, primarily, the seat of ulceration. My own belief is, that it is not so affected, but that the symptoms justify the conclusion that the disease extends to the cartilage secondarily, as I have described, from synovitis; or, as illustrated in Case 6, from inflammation and caries of the cancellous texture of the bone.

I had not the opportunity of seeing this case until between three and four months had elapsed since the commencement of the attack; therefore the early symptoms are involved in some obscurity. The diagnosis at which I arrived was formed on the existing state rather than the previous history of the patient. The extremities of the cylindrical bones were somewhat enlarged, especially that of the femur; but the capsule was not at all distended, though there was a circumscribed spot which fluctuated on the outer side of the joint, or rather conveyed the impression that fluid, probably pus, existed there. The result proved that this was deceptive. The whole joint was acutely tender, and flexed immovably at an acute angle; at least, the slightest attempt to extend the limb caused such excruciating suffering that it was desisted from. The slightest jar to the joint, the lightest pressure on the patella, caused extreme pain. These symptoms led me to the conclusion that there was ulceration of cartilage consequent on caries of bone; and the result proved its correctness. The prostration and sufferings of the poor girl led me to adopt a soothing and supporting treatment, anticipating the probable necessity of resection of the joint at a later period, if other treatment failed. But the unabated suffering, the quick and irritable pulse, and the severe spasmodic starting of the limb, induced me to hasten the operation, which she earnestly begged for; indeed, she was sent up to have her thigh amputated. I operated within a month of her admission, and the result bids fair to justify the step which was taken. I may remark that the vascularity of the cancellous structure of the bones proved that the inflammatory action extended considerably beyond the articular surface, and probably accounts for a more protracted suppuration than might otherwise have been anticipated.

There is one other, and not infrequent, origin of disorganization of the knee-joint, and that is, necrosis of some part of the extremity of one of the bones. The presence of a sequestrum entails inflammation and caries of the neighbouring cancellous structure, and subsequent perforation of the cartilage and destruction of the joint, from the presence of the morbid products. Of this subject I have already spoken at a previous lecture (a).

On Cases 8 and 9 I have but few observations to make; and yet it is important you should readily and at once distinguish between suppuration external to, and within, the capsule of the knee. In the former case, where there had been no mechanical injury, and where the synovial membrane was evidently inflamed, probably from contiguity in the first instance, the seat of active disease was evidently external to the joint. To superficial observation, the deformity of the joint, and a fluctuating swelling might have suggested the belief that there was suppuration within the joint; but the limitation of fluctuation to the outer half of the articulation, and its extension over one-half of the patella, indicated that it was extra-articular. Besides, the constitutional disturbance was much less than would have existed, had the joint been the seat of suppuration. Simple incision was all that was needed to secure recovery.

In Case 9 we have an illustration of a not infrequent sequence of inflammation of the bursa over the patella. When this bursa suppurates, the density and consequent resistance of the superjacent tissues sometimes involves considerable swelling and inflammation of the surrounding parts, by which the real character of the disease may at first be masked. But the conical prominence in front of the patella, and the absence of the ordinary symptoms of synovitis, point out the true seat of the abscess. In such cases a free opening should be made, for suffering is hereby diminished, and the cure hastened. The limb should be kept at rest on a suitable splint.

ORIGINAL COMMUNICATIONS.

OPHTHALMOSCOPIC(b) MUSCÆ VOLITANTES IN A VERY MYOPIC EYE.

By JAMES JAGO, M.D. Oxon.
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I AM indebted to Mr. Andrew, my colleague in the Infirmary, for kindly calling my attention to a condition of eye in one of his patients in which he knew me to take an interest. This patient is under successful treatment for fistula in ano, is 42 years of age, a cotton-carder, and well-developed, has not had primary syphilis for twenty years, and seems to suffer from no other disease than the one mentioned, except in his eyes. He believes himself to have been always near-sighted, though he was once far less so than at present, when his reading distance is within three inches from the cornea. His sight became first affected, "after an inflammation of the right eye," about seven years ago. There is now an opaque spot in the centre of the cornea of this eye, and a cataract fills the pupil. But he is still able to distinguish day from night in this eye, and sees circles of light in the sclerotic coat, on its being pressed upon by the end of a blunt probe in a dark room, so that the retina may be inferred to remain sound.

He still sees in his left eye as if the retina were unaffected by disease. But the eye is not only extremely near-sighted, but is troubled with muscæ volitantes, especially with one musca, which the patient compares to the crown of a hat, that incessantly obtrudes itself in the way of vision, and is large enough to hide the whole face, or even frame of any person to whom he may be talking. This effect is most annoying in bright light, or when the pupil is small. On the pupil being dilated with atropine, he fancied the musca to

(a) *Medical Times and Gazette*, No. 555, New Series, Feb. 16.

(b) Because visible to other persons as well as to the patient, as if ectoptical as distinguished from merely entoptical muscæ.

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have been removed. He must, therefore, see with a broad pupil by rays of light that pass by the material cause of the musca to converge upon the retina. These facts show that the cause does not lie near the retina.

To another observer the eye presents no morbid appearance, except on the use of the ophthalmoscope, and then only in the vitreous humour. With this instrument, whether the pupil be dilated with atropine or not, a greyish disc, of roundish shape, with a ragged, or irregularly-toothed margin, floats across the pupil, evidently large enough to cover the whole of such a pupil as is usual in daylight. There are also two much smaller discs, which float into view, the less not larger in appearance than the section of the head of a small pin. Either of these is somewhat triangular in shape. In three separate examinations they wore the same appearances, except on occasions altering their outlines, as if the bodies under examination were shreds of some kind, capable of being folded. If the bodies were watched until they disappeared from view, when the eye had been brought still, with its axis in the horizontal or some approaching direction, no matter what lateral motion they might have, they always finally sunk out of sight. And by carefully testing the places of these discs, by passing the focus of the convex lens used with the ophthalmoscope (the concave mirror and lens) to varying depths in the eye, they could, by the direction of those movements, be ascertained to be in the anterior part of the vitreous,—that is, by the simple counterpart of the proceeding long since proposed by me for entoptical researches.

With a little pains, I taught the patient to explore, with satisfactory skill, his eye, in the entoptical manner. On the use of a divergent pencil of light, he saw the foreign muscæ as opaque surfaces, describing the chief one just as it appeared under the ophthalmoscope. On fixing the optic axis horizontally, this musca seemed to ascend from view; whereas, with a convergent pencil (produced from a jet of gas at four yards distance from the patient, by means of a lens of an inch focal length, applied close to the eyelashes, and therefore throwing its focus about the middle of the vitreous), the musca disappeared under like conditions from the eye, in a downward direction. Hence, again, the body under examination must be in the anterior part of the vitreous, and tends to settle itself by sinking.

But the patient remarks, that besides this musca and one or two smaller like companions, he sees in the entoptical survey other floating appearances. These he describes as chains of round links,—in a word, describes accurately the phenomena contributed by the beaded elastic fibre that prevails in all vitreous bodies, telling me that the pencil sketches I made from his descriptions were as correct as if I saw the appearances myself. By causing him to use successively divergent and convergent pencils of light, it appeared that these beaded fibres in the back part of the vitreous moved as if in a fluid of greater specific gravity than themselves, while those in the front part moved as if in a fluid of less, as they may be observed to do in every sound eye.

For more precise instructions as to my mode of carrying out entoptical investigations I must refer to an Essay of mine in the *Medico-Chirurgical Review* for April, 1859, as also as bearing upon the pathological change which the vitreous body may have undergone in the case before us, to certain views I have there proposed as to its structure. I have there insisted that the entoptical phenomena displayed by the beaded fibre admit of no explanation but on the supposition of the vitreous body being divided into several separate compartments containing fluids of different specific gravities, in such a way that the fluid in that next the crystalline lens is the heaviest of all, and that next the retina lightest, while generally the fluids in the successive compartments gradually grow lighter from the lens towards the retina. In other words, I believe it to be thus demonstrable that the ordinary elastic fibre does not float in a fluid, but that a graduated augmentation in specific gravity in the fluid contents of the vitreous body from behind forwards, compels them so to move that the anterior part in all positions of the eye in which its axis is not vertical, strives to sink to the bottom, and the posterior part to rise to the top, as far as the dissepiments of the vitreous permit.

Now, if this be so, the movements we have noted in the foreign muscæ that molest the patient do not allow us to infer that their causes tend to subside to the bottom of a fluid of less specific gravity than themselves. They are merely observed to concur in movements proper to that of the fluid in the anterior portion of the vitreous in healthy eyes. And the very fact of the patient noticing the usual crossing currents of the anterior and posterior beads of the elastic fibre, under the force of gravity, goes to show that his vitreous body is still divided into chambers; that its dissepimental structure has not been materially damaged. Indeed, his entoptical examination made it plain that the cause of the chief musca did not sink to the bottom of the eye when its axis was horizontal, but *rested* just behind the outer margin of the pupil, a little beneath the level of its transverse axis. Also ophthalmoscopic and general considerations founded upon examining the eye in different directions of its axis lead to the conclusion that the body in question does not stray far from the region mentioned. It would seem thus either to be attached to a dissepiment, or to fall into an angle of one of the chambers of the vitreous.

It being presumed that the dissepimental membrane is allied in nature to the serous, consisting of a network of elastic fibre filled up with more homogeneous material, I am not aware that we should take for granted that its being untraversed by blood-vessels precludes it from attacks of inflammation and the ability to exude lymph, so that the flakes in view may not be organised patches from effusions on the dissepiments. Otherwise, the vessels near the border of the crystalline may have thrown lymph into the first chamber of the vitreous which may have failed to become absorbed, whether it has adhered to the dissepiment or not.

I have in the *Review* cited assigned optical reasons for the division of the vitreous into chambers containing fluids of diminishing densities, the fluid becoming step-by-step rarer from the lens to the retina, so that the vitreous should be regarded as a compound meniscus lens, or rather as a continuation of the superimposed layers of decreasing densities of the posterior half of the crystalline lens, and, therefore, as endowed with similar gradations of refracting power. It may be fancied that osmose would so act through their membranes as to prevent the loculi from keeping fluids of different densities sufficiently apart, and, perhaps, that it is hard to conceive how membranous expansions to all appearances identical can secrete fluids of unlike densities to supply the successive loculi. It may be replied that, granting the osmotic force to be necessarily so great as here imagined, which may, perhaps, be open to doubt, if the densest secretion were to take place at the capsule of the crystalline lens, or ciliary folds, where it probably may occur, into the next loculus, whilst absorption were chiefly to operate along the hyaloid expansion, the effect of the osmotic force would be to perpetuate the very gradation in density which I venture to maintain must exist. Or, if the whole of the secretion be poured into the loculus next the lens, and the dissepiments be mere membranous filters, even though all of one fineness, a *fortiori* if these be coarser in a series from the lens to the retina, the loculi will contain fluids of the graduated densities imagined.

The abnormal myopic state of the eye in connexion with ophthalmoscopic muscæ is another point of interest; inasmuch as many other cases are on record of the association of these symptoms.

Some writers have observed in such cases staphyloma of the retina in the region of the punctum aureum from wasting of the choroid membrane, and have ascribed the morbid short-sightedness to the consequent increase of distance between the crystalline lens and the retina. There are grave objections to this hypothesis: for the retina could not be thus bent without distorting the field of vision, and presenting a dark line corresponding to the edge of the pit into which the staphylomatous part sinks. Dr. Thomas Young and others have demonstrated that no conceivable change in the length of the optic axis can account for the ordinary power of focal adjustment with which the eye is endowed. The whole thickness of the choroid would be a mere fraction for three inches of diminution in the eye's focal length. The discovery of the ciliary muscle and observations upon the images of an elongated flame formed by reflection at its two surfaces, etc., by Cramer and Helmholtz(a) respectively settle the question of the seat and mode of focal accommodation, showing that it is brought about by change in the form of the lens. In the patient, the

(a) See "Mechanismus der Accommodation," by this writer, "Allgemeine Encyklopädie der Physik," s. 103.

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contraction of the iris by atropine did not beget a longer range of vision, yet all the ascertainable morbid effects seem to be confined to that portion of the vitreous which lies next the lens, and it is just here that we should, from what is known of the optical requirements of the eye, be inclined to look for a pathological effect capable of shortening its focal length. May not an inflammation about the ciliary processes both have occasioned flakes in the vitreous, and a contraction of the tunical attachment of the ciliary muscle? or given rise to some exudatory thickening along the margin of the capsule of the lens within or without it, or in its very substance, by which the lens has become permanently compressed? or by which such a change has occurred in the extreme border of the lens as to damage its elasticity. If so, the cause of the loss of focal adjustment lies within reach of the knife. Or if there be no hope of restoring such a power when once lost, the cause of exceedingly inconvenient shortness of sight is within such reach. Even the flake in the vitreous may be so. Snipping away a portion of the iris, or any operation by which a permanent enlargement of the pupil may be induced, would improve the man's vision, were it thought advisable to hazard any operative proceeding; perhaps also it may be worth while to consider the propriety of trying section of the ciliary muscle with a view to possible relief of the short-sightedness.

However, it may not be quite futile to mention, that a lessening of the density of the vitreous body, that is, of its refractive index, would shorten the eye's focal length; inasmuch as it is said to often become fluid, or dissolved, when ectoptical muscæ are met with. But the refractive index of the humour does not differ so much from that of mere serum, or water, that such a degeneracy could occasion any approach to the extent of sight-shortenings which have been reported in connexion with these muscæ.

Also, to one persuaded that the vitreous is a compound lens, the question will present itself, whether that portion of the ciliary muscle called the *tensor choroideæ* could modify the form of such a lens? for it is inserted into the choroid at the *ora serrata*, where this lays hold upon the vitreous, and it is conceivable that it may pull forwards its outermost dissepiment, running nearly parallel to the hyaloid membrane, so as to compress laterally its anterior, densest stratum of fluid, making it more gibbous, thus causing a change in the general form of the body, corresponding, in some measure, to that effected in the crystalline. Whilst throwing out this suggestion I lay no stress upon it.

The notes of the case which have given rise to these reflections, as well as the accompanying reflections themselves, except the concluding couple, were written in the spring of last year. My apology for laying them before the Profession now must be the hope that some of its members may find points of interest in them.

RESULTS OF SOME TRIALS OF THE HYPOPHOSPHITES IN THE TREATMENT OF PHTHISIS.

By JAMES RISDON BENNETT, M.D.
Late President of the Hunterian Society.

(Continued from page 440.)

The remaining cases, the leading features of which I will briefly state, will enable anyone to judge how far the hypophosphite of soda can be considered a specific for phthisis.

G. B., aged 34, labourer, residing in Homerton. Health failing for four months, during which time he has had cough with expectoration, and has spat blood. His aspect is anæmic, weight 10st. 4lbs. Pulse 76; appetite fair; tongue flabby. Physical examination revealed deficient resonance of right apex, with augmented cough resonance, and subcrepitant *rales* over a large space. On the left side the respiration was harsh, and the expiratory murmur prolonged, and the vocal resonance increased. He entered the Hospital on January 3, and left on the 28th at his own request, expressing himself as much relieved, the cough being alleviated, the appetite good, and having gained 2lbs. in weight. The treatment consisted in the application of the liq. vesicatorius beneath the clavicles, and the exhibition of fifteen grains of the hypophosphite of soda, with infusion of quassia, three times a-day, mixed diet, and half-a-pint of porter. As, however, he was weak, and still presented an anæmic aspect, he had the steel and quinine mixture given him to take with him.

J. S., aged 19, carman, was admitted April 14, 1860. A young man of light complexion, living in Wapping; height, 5ft. 4in.; weight, 7st. 10lbs. His health had been good till nine months ago; since then he has had much cough, with expectoration. But his cough has existed much longer, and he has had hæmoptysis. Aspect pale, emaciation marked, appetite fair, bowels regular, tongue flabby, cough chiefly in the morning, with scanty expectoration; pulse 120. The respiration was harsh in both apices, with a great deal of small crepitation and creaking, and increased cough resonance. He took the hypophosphite of soda in an infusion of quassia three times a-day till May 10, with meat diet and half-a-pint of porter. He had then gained 3lbs. in weight. It then became necessary to alter the treatment, in consequence of derangement of the digestive organs. On May 24 he was not improving, and was ordered bark and sulphuric acid. But, on the 29th, having lost 2lbs. in weight since his admission, he left the Hospital.

Mary F., aged 16, servant, admitted April 30, 1860. She resided in Gray's inn-lane, and her father died of phthisis. Her form is spare, and complexion light. Has been gradually declining in health for twelve months. No hæmoptysis, but the expectoration, which till lately was scanty, has occasionally been streaked with blood. Tongue red in centre and tip; furred at sides. Appetite fair. Pulse quick and feeble. Catamenia absent some time. Tympanitic resonance and cavernous respiration, and generally signs of extensive and advanced disease of the left apex, with only harsh respiration, and prolonged expiration and occasional rhonchus in the right apex. Her weight, on admission, was only 6st. 6lbs., and her height 4ft. 8in. She was ordered nothing, at first, but the hypophosphite of soda in infusion of quassia; but a few days after, the cough being very distressing at night, she was ordered a morphia draught at bedtime. On May 24 the draught was replaced by five grains of extr. hyoscyamus, with which she took an aloes and myrrh pill. On June 9 she had gained two pounds in weight; her general health was improved; the tongue clean, but rather red at the tip. She had, however, night-sweats; the cough was troublesome, and the expectoration copious. On the 23rd she had not gained further flesh, but her general health seemed better, though no very marked change had occurred in the physical signs.

E. H., aged 27, a married woman, from Ewell, in Surrey, was admitted on March 4, 1860, with signs of advanced disease in both apices. She was placed on the hypophosphite treatment, but rapidly got worse; had an attack of diarrhœa on the 15th; and went out, at her own request, on the 17th.

Eleanor W., aged 22, a servant, was originally admitted in 1858, having for some time been in delicate health and presenting suspicious but not decisive symptoms of phthisis. She had lost three sisters and two uncles by phthisis. She was anæmic, her general health impaired, and the catamenia suppressed. She complained a good deal of clavicular and thoracic pains, and had a cough. She was put on the ordinary tonic treatment, gained six pounds in weight, and went out apparently quite well. She appeared again, however, in 1860, and was re-admitted on February 24. Her general health had been then declining again for five months, the catamenia again suppressed three months, and her aspect very pale; but she had neither cough nor expectoration: the only physical signs were slight deficiency or feebleness of respiratory murmur in the left and perhaps also in the right apex. She was ordered the hypophosphite of soda in infusion of quassia, and took this alone, till March 31, when she had gained four pounds in weight. She was then ordered the steel and quinine mixture, and on April 27 had gained three pounds more, when she was again discharged.

George T., aged 20, a weaver, admitted April 28, 1860. Had lost a brother of phthisis, and his own health had been bad fourteen months, having had hæmoptysis and cough, with expectoration, throughout. His appearance was pale and emaciated; his tongue much coated; bowels regular; expectoration thick yellow—nummular. Physical examination indicated extensive advanced disease in both apices. He was ordered the hypophosphite of soda in infusion of quassia; liq. vesicatorius to the sternum; meat diet, with wine

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and porter. May 13.—He was retrograding in all respects, and the treatment was abandoned for the usual tonics and cod-liver oil, and he left the Hospital on the 24th with evidently advancing disease in both lungs.

William J., aged 36, a coachman, residing in Islington, admitted March 17, 1860, a man of dark complexion, weighing 8st. 12lbs. Health declining two years, and for some time has had night sweats, and considerable expectoration. His appetite was fairly good; the tongue clean, and the bowels regular. He presented the physical signs of phthisis in the third stage in the left apex, and in the second stage in the right apex. He was ordered an opiate draught at night, and hypophosphite of soda in water three times a-day. April 13th.—He had gained more than two pounds in weight, his cough was relieved, and his general health improved. He went out of his own accord.

Eliza C., aged 22, dressmaker, residing in Gray's Inn-lane, admitted March 10, 1860. Complexion light; weight, 7st. 3lb. Father had died of phthisis. Health declining four months, but had cough for seven months. Slight hæmoptysis five weeks since; expectoration scanty; catamenia suppressed five months; appetite fair; bowels regular; tongue clean, tolerably healthy; pulse 100; flattening; dulness; increased cough resonance of left apex. She was placed on the treatment by hypophosphite of soda, with meat diet and half-a-pint of porter; but the subclavicular pain and tenderness of which she complained, rendered it necessary to employ the liq. vesicatorius several times, by which she was relieved. On March 26 she had lost one and a-half pounds in weight, and was in all respects retrograding, and the treatment was, therefore, abandoned for the steel and quinine mixture, with cod-liver-oil. This appeared to benefit her for a while, but she left on May 14, very little improved.

Michael K., aged 25, tailor, residing in Paul-street, Finsbury, was admitted on July 11. Weight, 8st. 9lb.; complexion dark. He stated that his previous health had been good till two years ago, since when he has had cough, which has been worse during the last year, and attended by expectoration; but he admits that four years ago he had a severe attack of hæmoptysis. His aspect is pale and emaciated; tongue clean; appetite good; bowels regular; night sweats occasionally; cough urgent; expectoration considerable; pulse 108. The physical examination of the chest indicated considerable emaciation of the thorax; slightly diminished percussion resonance under the left clavicle, with increased cough resonance; more or less crepitation over the greater part of that side; crepitation and loud cough resonance over the right apex, and harsh respiration and prolonged expiratory murmur lower down. The case was noted as one of phthisis in the second stage, with diffused tuberculization. Mixed diet. Liq. vesicatorius sterno.,. hypophosph. sodæ, grs. xv. ter die ex aqua, was the treatment ordered for him. March 20.—General health somewhat improved; appetite good; tongue rather red; cough chiefly towards morning. He had gained 4½lbs. in weight. April 2.—Weight 2lbs. less than when last weighed, but 2lbs. more than on admission. But little cough; altogether considerably relieved. He has, however, since March 23, when he began to lose ground, taken the mist. ferri et quinæ and the oleum jecoris.

M. A. K., aged 17, a servant, admitted January 11, 1860. Resides at Kew. Height, 5ft.; weight, 5st. 3½lbs. In ill-health three months. No hæmoptysis; cough and expectoration throughout; often night sweats; pale and very emaciated; pulse very feeble; catamenia absent seven months. She presented the physical signs of extensive disease, far advanced in the left apex, with harsh breathing and subcrepitant rhonches in the right apex. She was placed on meat diet, with wine, and ordered the dec. cinchonæ cum acido sulphurico and ol. jecoris. On the 19th the mixture was changed for the steel and quinine mixture, with opiates at night. On January 30 the expectoration was less, and the cough relieved, but her appetite was bad, and she was losing flesh. On February 16 I ordered for her grs. xv. sodæ hypophosphitis ex infus. calumbæ, ter die. She continued to retrograde, however; and on July 27, when she left the Hospital, she had lost 8½lbs. in weight.

A. C., aged 29, an engraver, residing in Clerkenwell. Had lost a sister from phthisis. His general health had been declining for one year and four months. Has had night sweats; cough and expectoration six months. No hæmoptysis; aspect pale; emaciation marked. Height, 5 feet 8 inches; weight, 8 st. 1½ lbs. Tongue coated; bowels regular; appetite tolerable; cough very troublesome at night. The physical signs were those of tuberculisation in the first stage in the right apex, and of the second stage in the left. Throughout the chest there was a good deal of sibilant rhonchus. He was put on meat diet, with half-a-pint of porter, and the hypophosphite of soda in infusion of quassia ter die. It became necessary, however, in a few days, to allow him an opiate at night, in consequence of the severity of the cough, and to use the liq. vesicatorius below the clavicles. On May 21 he was fast losing ground, and was ordered cod-liver oil, and steel and quinine; and on June 26, when he left the Hospital, was confined to bed, and not weighed,—all his symptoms indicating rapid advance of the disease.

(To be continued.)

CASE OF ENCYSTED ABSCESS IN THE VITREOUS HUMOUR.

By JAMES G. HILDIGE, F.R.C.S.

From the fact that I do not find any mention made, in works on Ophthalmic Surgery, of a circumscribed abscess in the vitreous humour, I am disposed to believe that this occurrence belongs to the rarest inflammatory results observed in the eyeball.

On the 20th of March last I was asked by Dr. Nolan, of this city, to see John W., aged 58, a retired artilleryman, residing in Gloucester-place, and who had been suffering from inflammation of the eyeball for several weeks. He was a sallow, unhealthy-looking man, but, according to his own account, had always enjoyed good health, and had never served out of Great Britain. The eyelids of the affected eye were very much inflamed and swollen, the folds of the integument being completely obliterated, the eye itself was intensely chemosed and projecting from the orbit, the cornea was opaque in its whole extent, and the severe lancinating pains in orbit and temple had almost wholly banished sleep for nearly a fortnight. The right eye was sympathetically affected, and he was unable to open it, on account of the very great sensibility to light. He stated that about five weeks previously he had caught cold in his eye while out walking, for which he had been treated at the dispensary in the neighbourhood. On his way to the dispensary one very cold morning, his symptoms became much aggravated, and on the following day intense pain in the eyeball set in, which was speedily followed by a total loss of vision. The pain was continuous, but was subject to exacerbations, which became intense at night, lasting until four or five o'clock in the morning, when it slightly abated. As the patient had been salivated, leeched, blistered, etc., without effect, and as he was wasted to the last degree, further medical treatment was out of the question; I, consequently, had him removed to the North City Eye Infirmary, and on the following day I enucleated the eyeball. The following was the result of the examination of the eye, which was made by Drs. Cruise and Curran, the Anatomical Lecturers at the Carmichael School of Medicine:—

The form of the globe was considerably changed, its antero-posterior measurement being much greater than in the normal condition; its transverse diameter was also slightly increased. The cornea was perfectly opaque, and its curve much greater than natural. On making a transverse section of the eyeball, a perfectly circumscribed abscess, about the size of a small pistol-bullet, enclosed in a membraneous sac, and containing laudable pus, was observed in the centre of the vitreous humour. It was perfectly free, posteriorly and laterally, but anteriorly it was connected by fibrous bands to the ciliary body. The portion of the vitreous humour immediately surrounding the abscess was opaque, but no pus globules were detected in it. The iris was attached to the cornea in its whole extent, the pupil was filled up with lymph, and the lens and its capsule were perfectly opaque. From the very great congestion of the choroid, I fully expected there would have been exudation found between it and the retina, and partial detachment, at all events of the latter, from the choroid, but neither one nor the other of these results was present. The increased sensibility and irritation of the right eye rapidly diminished after

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the operation, and the patient can now distinguish the surrounding objects with it.

On referring to Professor Arlt's work on "Diseases of the Eye," I find the following remarks in the chapter on Exudations into the Vitreous Humour:—"Post-mortem examinations have proved beyond doubt that results occur in the vitreous humour, which can only be considered as the products of inflammation. It is, however, very probable that these products are not generated in the vitreous humour itself by inflammation of its substance, or of its enveloping membrane, but are carried into it from the surrounding tissues. For, neither the vitreous body, nor the hyaloid membrane, is furnished with vessels or nerves, without which inflammation cannot take place, and such products are never met with in the vitreous body, without inflammation of the choroid being present. The term 'Hyalitis' owes its existence, not to the observation of symptoms, which can only be referred to inflammation of the vitreous body, but to the attempt to create a train of phenomena for each tissue of the eye, which will convey the idea of inflammation of it, in order that no gap may be left in the systematic representation of the diseases of the eye. The only real foundation for the disease termed Hyalitis, is to be found in the occurrence of inflammatory products in the vitreous humour, which, however, can and must be explained in a very different manner. These products are the result of inflammation of the ciliary body or choroid, and are carried into the interior of the vitreous humour, in the same manner as the nutritious plasma in the normal condition."

Mr. Bowman, to whom I related the above case, believes with Professor Arlt, that pus found in the vitreous humour is, in a great measure, derived from the choroid and ciliary folds.

Dublin.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

CONDUCTED BY

JONATHAN HUTCHINSON,

Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital,

AND BY

J. HUGHLINGS JACKSON, M.D.

HOSPITAL FOR THE EPILEPTIC AND PARALYSED.

CASE OF WASTING PALSY—CLINICAL REMARKS.

(Under the care of Dr. RAMSKILL.)

[Reported by Mr. C. SMITH, House-Surgeon.]

William B., aged 42, a tall, dark, strongly-built man, of dark complexion, quick in manner, acute in intellect, has strongly-pronounced features. He was a labourer, living in a small, crowded room, and had been a man of very irregular habits. He has four children, all healthy. His father and mother both died young; of what disease he does not know. He stated that he had suffered from spitting of blood for twenty years "on and off," and that he had vomited a pint of blood on one occasion, about a year ago. After a slighter attack of this kind, about three years since, he observed a stiffness in the middle, fourth, and little fingers of the right hand: "they curled up," he could not straighten them. The wrist also dropped. They remained in this condition on admission. The affected fingers could be straightened by gentle traction, but the effort gave him pain. The thumb, first finger, and the muscles of the rest of the entire upper extremity appeared healthy, and the arm could be moved in any direction. The affected fingers were wasted, as were also the interossei. He had no anæsthesia, nor pain of any kind. The extensor muscles of the forearm did not appear wasted. In a week after the affection of the right hand commenced he found a weakness in the left wrist. It then passed to the elbow and muscles of the shoulder-joint, and "settled there." The weakness gradually increased, and in three months the limb became useless. It was not preceded by pain, there was no pain when admitted, and no anæsthesia. He could flex and extend the fingers, but could not abduct or adduct any of them or the thumb. The hand was somewhat wasted, and the thenar and hypothenar eminences were much diminished. He could maintain the state of flexion of fingers and carry a tolerable weight under handed, as half-a-pail of water, etc. The muscles of the arm were wasted, the extensors most so. The biceps was reduced to a small fibrous cord; the triceps was not so much wasted; the deltoid supra and infra spinatus and teres have all but disappeared. The scapula was lifted up by the levator anguli scapulæ; it was not much twisted. The pectoral muscles to the eye appeared largely developed, but they were believed to have undergone fatty transformation. The mammary gland was hypertrophied. Power of movement was entirely lost in the limb, he could not lift it half-an-inch from his side.

On the application of electricity the usual results were obtained—that is to say, where most muscular fibre remained (as in the flexors of the fore arm), there most contractions followed, whilst none whatever resulted from its application to the biceps, deltoid, supra and infra spinatus. Feeble and various in degree were the contractions obtained in the muscles of the hand, always corresponding to the amount of healthy muscle left. There was no quivering of muscles perceptible anywhere. Together with wasting, contraction of the degenerated and wasted muscles of the shoulder have occurred; so that the arm can, with difficulty, be lifted by force two or three inches from the side. Dr. Ramskill observed that the case differed from Cruvielhier's palsy, amongst other things, in that there was no previous or present pain, no quivering, and there was complete arrest of the disease for two years and eight months.

There were no discoverable symptoms of lead poisoning, neither any symptoms of head or spinal affection. The heart sounds were normal, the pulse full and strong, very different to that in wasting palsy, and, in fact, no discoverable internal disease whatever. The patient maintained he had very good health. The cause of the affection was most obscure, and the treatment relied on was to be chiefly local.

February 22.—Iodide of potassium in four-grain doses were given three times a-day, along with infusion of rhubarb and decoction of cinchona. A lotion of the sulphuret of potassium was used every night and morning. Galvanism was directed to be applied twice a-week.

This treatment was continued till April 19th. The patient states he can flex all the affected fingers more strongly. The power of extension remains *nil*. Dr. Ramskill feared that the future of this case would not be hopeful. The muscular fibre and consequent power which still remained might be maintained, and so far as the muscle existing could be improved in quality, even increased (by means of galvanism and the sulphuret lotion); but the transformed or degenerated tissues were beyond our means for restoration.

GUY'S HOSPITAL.

FATAL CASE OF GLANDERS.

(Under the care of Mr. BIRKETT and Mr. BRYANT.)

Sidney W. M., aged 23, a horse-slaughterer, residing at Plumstead, was admitted into Guy's Hospital, on March 13, 1861, under the care of Mr. Birkett. He had always had good health, but had lived freely. Six days previous to his admision he cut his right hand deeply over the dorsal aspect of the thumb. The wound bled freely; but he felt no inconvenience from it of any consequence until the 10th. He then had pain in the part, extending upwards to the axilla, and also a numbing pain in the calf of the right leg. His appetite was, however, good, and he had so little constitutional disturbance that he went as usual to superintend the work, which the accident had prevented his carrying out. On the 11th the pain in the arm increased, and that in the leg on the 12th extended upwards to the thigh. This had become considerably aggravated, and he then became generally indisposed and was unable to stand. The following day he applied for admission.

He stated that he was extremely ill, and that his limbs felt almost paralysed; he was quite unable to stand. He had constant rigors, a burning skin, white tongue, and his pulse was 120. The wound in the hand was inflamed, and the calf

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of the right leg and the thigh were swollen, and evidently the seats of abscesses. These were freely opened with relief. He was ordered effervescing medicine, and two pints of porter. The case was then regarded as one of pyæmia.

On the 14th he was much relieved. He had slept tolerably. The abscesses discharged freely, and he was able to take his food.

15th.—He was seized with vomiting, bringing up a dark bilious fluid. His powers were less. Wine was given freely.

On the 16th the vomiting continued, and he complained of pain in the left thigh. An abscess was discovered on examination which was freely opened. The man at this time was physically in a very low condition. He took brandy, eggs, and other liquid nourishment with avidity. His manner was peculiar and somewhat excited.

On the 17th another abscess was opened in the left arm. On the 18th the left foot became the seat of an abscess, and on the 19th, for the first time, a pustular eruption was observed on the face and body, which suggested to Mr. Bryant the probability that some animal poison was the cause of all this mischief.

The eruption was peculiar, having no definite shape. It appeared to be more like small irregular blebs, containing pus, varying from the size of a pea to a sixpence. Some were round, others oval, and others of an irregular form. Towards evening also his breathing became much impaired, a bloody mucus obstructing the nostrils. Towards night he became delirious, his powers became less, the nasal discharge more profuse, and at 1.30 on the 20th he died. The eruption some hours before his death in parts had disappeared; but in others a fresh crop sprang up, particularly over the region of the sternum; these were, however, of the same character, but smaller.

No post-mortem examination was made.

UNIVERSITY COLLEGE HOSPITAL.

NECROSIS OF THE RADIUS WITH DISEASE OF ELBOW-JOINT—RESECTION OF THE DISEASED PORTIONS OF BONE.

(Under the care of Mr. ERICHSEN.)

The following case is an example of necrosis of the greater part of the radius, in which the disease, instead of stopping, as is usual, at the epiphysis, extended upwards into the elbow-joint. It will be noticed that the patient was older than is usual in the subjects of acute necrosis. The circumstance that this disease is by very far more frequent in young persons than in adults, may, to some extent, account for the fact that the epiphyses are so seldom involved.

The extraction of a sequestrum which involves the expanded articular head of a long bone, is always extremely difficult. In this case, as will be seen, it proved impracticable to get away the necrosed shaft without removing also the shell which encased it. In respect both of the large amount of bone taken away, and the partial excision of the joint, the case is one of peculiar interest.

A man, aged 26, of healthy family, was admitted in January last, under the care of Mr. Erichsen, for extensive necrosis of the radius and disease of the elbow-joint. He had good general health until about fifteen months ago. About this time, after exposure to wet, he was seized with severe aching pain in his right forearm. This he endured for upwards of a week, during which he was obliged to carry his arm in a sling. A quack gave him something to rub into the arm, after which the pain increased very much, and the arm began to swell, and in less than twenty-four hours it was twice its natural size. He became severely ill, and was then attended by a Surgeon. He was for one week insensible and delirious. From this time his arm has been diseased, abscesses formed in various parts, and ultimately nearly the whole of the shaft of the radius necrosed. Several months ago he was recommended to have the arm amputated, and he was sent to Mr. Erichsen, in order that some operation should be performed. Mr. Erichsen considered that a conservative operation might be performed, and the limb restored to comparative usefulness. He therefore advised him to wait. The man accordingly returned home for a few months.

On January 30 the man was brought into the theatre for the removal of dead bone. The operation was commenced by slitting up the various sinuses and exposing the upper two-thirds of the radius. In great part there was a covering of new bone, but in several parts the sequestrum was exposed. Mr. Erichsen made many attempts to remove the dead bone, but it was firmly fixed, incarcerated within the new, and quite immoveable. He therefore cut off and removed the upper two-thirds of the radius, both sequestrum and new bone encasing it. The periosteum was carefully preserved. On removal the sequestrum was found so tightly fixed in the new bone that it was clear that no amount of force could have got it out. Mr. Erichsen found also that the external condyle of the humerus at its articular surface was carious, as was also the facet of articulation of the ulna with the radius. These parts, therefore, were removed. The man's arm was anchylosed at an obtuse angle prior to the operation, by fusion together of the ulna and humerus. This was not disturbed at present but left for future operation. In spite of the removal of so large a portion of the radius, Mr. Erichsen said that he believed a very good arm would result. He referred to a case in which he had several years ago removed the *whole* of the radius, and which resulted in a comparatively good arm, the patient being still under observation.

March 13.—Mr. Erichsen to-day brought the man again into the theatre for the division of the anchylosis between the ulna and humerus. The wound of the former operation was nearly healed. He had, he said, removed most of the radius, leaving only about two inches at the lower end to support the hand. He had also removed the external condyle of the humerus. He now operated in order to bring the arm into a good position. He first made a longitudinal incision over the joint. The ulna was anchylosed to the humerus; he therefore divided the osseous adhesions with a saw, and then bent the arm at right angles. He now found, however, that there had been dislocation of the ulna backwards, and the olecranon projecting unduly, he cut it off.

The patient progressed favourably after this operation, and left the Hospital for change of air in the early part of April. The wounds had now nearly healed. The forearm was bent at a right angle with the arm. The limb was supported on a hinge splint, so as to secure a movable articulation, and new bone appeared to be depositing along the track of the excised radius.

ST. BARTHOLOMEW'S HOSPITAL.

PRIMARY SYPHILITIC SORE OF THE UPPER LIP —ENLARGED GLAND UNDER THE ANGLE OF THE JAW—RECOVERY UNDER THE USE OF MERCURY.

(Under the care of Mr. WORMALD and Mr. HOLMES COOTE.)

The following cases show how ready the Surgeon should be to detect diseases which happen to occur in unusual seats. An ulcer of the lip would not be very likely to suggest the idea of syphilis. There is something, however, in the appearance of a chancre which is characteristic to a practised eye. In this case the ulcer was at once pronounced to be a chancre, and the improvement by mercury confirmed the diagnosis. In another case (Mr. Dixon's) which we give below, the appearance of the ulcer, on the lower eyelid, was so characteristic that it was at once recognised by Mr. Dixon and several of the Hospital staff.

A woman, aged 23, was admitted into St. Bartholomew's Hospital on March 15, under the care of Mr. Holmes Coote. On the right side of her neck, below the ramus of the lower jaw, was an enlarged gland, and on her upper lip an ulcer the size of a shilling. She said that, two weeks before, there was only "a small blister," and of this she took no notice. The gland under the jaw then enlarged, and she applied on that account. There was on admission fluctuation, and the matter was therefore evacuated. There was no doubt as to the nature of the ulcer, and its treatment by the internal administration of grey powder was at once commenced by Mr. Coote, under whose care the patient at first came. This, however, failed to produce much effect, and nitric acid was applied to the sore. She now came under the care of Mr. Wormald. Mercurial inunction was then had recourse to. Under this treatment the ulcer rapidly improved, and now (April 18) is nearly healed. There is, however, rather a large gap left in the lip at the junction of the skin

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and mucous membrane. The swelling under the jaw is quite gone, and the wound of the incision is healed.

THE ROYAL LONDON OPHTHALMIC HOSPITAL.

PRIMARY SYPHILITIC ULCER OF THE LOWER EYELID — TREATMENT BY MERCURIALS — RECOVERY.

(Under the care of Mr. DIXON.)

Jane H., a married woman, aged 29, admitted March 26, for ulceration on the left lower eyelid. The ulcer was about an inch in length involving the greater part of the cutaneous surface of the lower lid. It had a hardened base and its surface looked greyish and was very like a chancre. The diagnosis was established by the appearance of the sore, and two Surgeons who saw the case independently at once, without further investigation, pronounced it to be chancre. She was in remarkably good health. The ulcer had existed three months. It first began as a "small stye" and gradually extended. The only treatment had been poultices and the internal administration of milk of sulphur. She had no discharge, nor any local disease at the vulva. In December she had some discharge, and she thought a few "little blisters" on the labia. She also said that she then had some sore throat. Four years and a-half ago she had the disease from her husband. It was followed by sore throat and rash. There were still scars of the rash, which was probably syphilitic ecthyma.

March 26.—Mr. Dixon prescribed a pill containing three grains of blue pill and half a grain of opium three times a-day. The mercurial treatment was continued until May 3. Then iodide of potassium in ten grain doses three times a-day was prescribed in addition to the mercurial. The ulcer healed very slowly, and a large scar was left, but the lid was not everted. She was discharged well on June 11.

THE POPLAR HOSPITAL.

POPLITEAL ANEURISM—COMPRESSION TREATMENT—CURE.

(Communicated by Mr. CORNER, Surgeon to the Hospital.)

B. C., aged 38, by trade a shipwright, applied to me in December, 1859, complaining of swelling and coldness in the left foot and leg, which had existed more than a month. On examining the parts no pulsation could be felt in either tibial artery, or in the popliteal or femoral below the giving off of the profunda. He had noticed pain and stiffness in the popliteal space, where now existed a firm swelling about the size of a nut. He was recommended gentle exercise and friction, with the effect of very slow amendment; the swelling quickly dispersed.

In February, 1861, he again consulted me on account of a swelling in the right popliteal space—first noticed a week before—and then measuring in length four inches and breadth three inches; strongly pulsating, and having a slight groove across its middle. Compression of the femoral completely stopped the pulsation, and steady pressure removed the tumour.

March 5.—I applied an elastic cotton bandage lightly from the toes to the hip, and put on Carte's instruments for compression, using them alternately at the groin and thigh. His pulse was quiet and very compressible, but anticipating some irritation from the pressure, I gave him liquor. morph. ♏v. and succi digitalis ♏x. ter die. Diet throughout was fish and meat on alternate days, and no stimulants. He bore the pressure well at first, and whilst the bandage remained evenly applied; but on its becoming loose, allowing the muscles that were flabby to spread out, a greater amount of pressure was needed to control the circulation, and more than could be borne beyond a couple of hours at a time: the glands, too, in the groin became swollen and tender.

On the 15th I carefully examined the aneurism and could not detect any amount of deposit therein, and now made use of a common sash-bolt weighing 7lbs., which, with the weight of the bed-clothes, laid partly on its upper end so far arrested the current of blood, that only an occasional and slight pulsation was felt in the swelling. The first day he kept it on the groin without remission, and experienced but little inconvenience—the upper end being looped to the cradle, and the lower having a pad of wool underneath. It was removed at night, and continued by day till 7 p.m. on the 18th when the foot and leg suddenly became cold and numb, and when seen by me the half of the aneurism below the groove was solid, and the tibials had ceased to pulsate. The bolt was continued for an hour or two at a time during the day, and on the 21st the sac was wholly filled.

He has gradually taken more and more exercise since, and on April 6 nearly all hardness had disappeared from the ham, and the man felt well, his only complaint being that he could not walk many miles without the foot becoming cold.

THE LIVERPOOL ROYAL INFIRMARY.

DILATATION AND DIVISION OF THE FEMALE URETHRA UPWARDS, AND EXTRACTION OF A STONE.

(Under the care of Mr. STUBBS.)

[Reported by Mr. HARRISON, House-Surgeon.]

The patient, Elizabeth B., aged 16, had been suffering from symptoms of stone for twelve or fourteen months, but she had refrained from seeking Medical advice. On admission, she complained of intense pain about the vulva and over the bladder. She had difficulty in passing her water, and the pain was always more severe afterwards. The urine was high-coloured and contained large quantities of mucus and some blood. On introducing a sound into the bladder, a stone could readily be felt. The day previous to the operation, the urethra was dilated by means of sponge tents.

May 19.—The operation consisted in introducing the finger into the bladder, by which means the urethra was sufficiently dilated to allow an ordinary pair of stone forceps to be introduced. The stone was readily seized, but found too large to be removed without very considerable damage to the parts around. The urethra was divided directly upwards, and the stone extracted with some difficulty. There was very little hæmorrhage. The parts were covered with wet lint, and she was removed to bed. The stone was an ordinary mulberry calculus, very irregular in shape, consequently accounting for the very severe pain she suffered; it weighed very nearly five drachms. For several days after the operation, her urine was constantly dribbling away, requiring much care in keeping her dry.

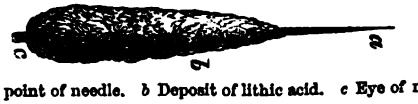
On the tenth day after the operation she could retain her water for two or three hours. She now rapidly improved in health, and on June 12 (twenty-three days after the operation), she was discharged cured, with perfect control over the bladder.

FOREIGN BODY INTRODUCED INTO THE URETHRA AND REMOVED EIGHTEEN MONTHS AFTERWARDS BY AN INCISION IN THE PERINEUM.

(Under the care of Mr. STUBBS.)

[Reported by Mr. HARRISON, House-Surgeon.]

The patient, a youth, aged 16, stated that eighteen months ago, he passed a needle into his urethra, and was unable to get it back again. Not liking to mention it he had nothing done for it, and refrained seeking Medical advice until the present occasion. He has been suffering lately with severe pain in the perineum, and on making an examination, an abscess was discovered in the ischio-rectal fossa, this was opened, and the interior carefully examined, but the needle could not be dis-



a Sharp point of needle. *b* Deposit of lithic acid. *c* Eye of needle.

covered. On introducing the finger into the rectum, the sharp point of the needle could be felt in contact with the upper wall, and on examining the perineum, a spot was found where something hard could be felt, an incision was made over it in the central line of the perineum and the needle removed. The patient recovered rapidly from this operation and the opening entirely closed, no urine escaping through it. The needle was more than half covered over with a deposit of lithic acid.

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FURTHER REPORT ON A CASE OF LIGATURE OF THE CAROTID ARTERY.

It is well known that in ligature of the carotid, whether for wounded vessel or for aneurism, the result is far from settled, when, as the case may be, the bleeding is arrested or the aneurism cured. Even when the patient is discharged from the Hospital apparently well, we cannot be sure that he may not yet suffer from the after effects produced by the ligature of a vessel so important to the circulation of the brain. It is, therefore, very desirable, when practicable, in addition to recording faithfully the condition of the patient when discharged, to follow up his case, and see how he bears return to active work. In one case which we recorded (1859, October 29, December 24, and 1860, January 28), the patient was at one time nearly well (about six weeks after the operation), and was about to be discharged, when cerebral symptoms came on, and he died. Abscess in the corresponding hemisphere was the cause of death.

We are now able to supply further details of another case which we recorded February 25, 1860. The patient, a man, aged 27, was admitted into St. Thomas's Hospital for wound of the external carotid. For this, Mr. Le Gros Clark tied the common carotid. The artery was tied on January 26, 1860, and our report carried the case up to February 17. The ligature had come away, the wound was quite healed, and the man had no head symptoms. He was at work and in perfect health in May, 1860. He was again seen by Mr. Clark six months later, and still continued well. We may therefore regard this case as one of permanent and complete recovery.

Medical Times and Gazette.

SATURDAY, MAY 4.

HOMŒOPATHY AT CAMBRIDGE.

We learn from the Cambridge newspapers, that Dr. William Bayes, a gentleman who in 1850 accepted the distinction of a degree of Doctor of Medicine from his Grace the Lord Archbishop of Canterbury, and who in 1853 and 1854 was directing the attention of his Medical brethren to the virtues of gallic acid in hæmorrhages, now professes his adherence to the Homœopathic dogma, and solicits the appointment of Physician to Addenbrooke's Hospital, vacant by the resignation of Dr. Fisher. We need scarcely say that we hope Dr. Bayes will be defeated, and we desire to state plainly the reasons on which we, as representatives of the Medical Profession, ground our opposition to him. It certainly is not from any love of a supposed orthodoxy, or from repugnance to anything new or strange in doctrine or practice. Medicine has no dogmas except such as are the result of every-day experience, and these are undergoing a daily process of sifting, rejection, alteration, and addition, to suit the daily increase of our knowledge of facts, and of our power of framing such theories as shall embrace those facts. Medicine is a purely sceptical, inquiring, doubting, revolutionary art; it has neither veneration nor love of precedent; and our own times have seen, and daily see, our own body attacking any established doctrine whatever without the slightest compunction. In fact, innovation and progress are the order of the day; and there is not one of us not willing to give up what we think or what we do, so soon as it can be shown that we can think more truthfully, or act with greater benefit to our patients. Among other novelties, Homœopathy, at its first introduction, was regarded with considerable favour. The apparent simplicity of its theory, and the striking nature of the one or two facts which were popularly adduced as proofs or illustrations (such as the use of purgatives in curing diarrhœa), really caused it to be received very indulgently; so that the entire theory was carefully studied, and the remedies carefully tried in health as well as in disease, by many of the ablest Practitioners of the day; and we will undertake to say, that there is scarcely a member of the Medical Profession who has not from time to time made experiments on himself and others, in order to test the alleged virtues, whether pathogenetic or curative, of medicines both in ordinary doses, and in that state of minute subdivision in which the Homœopathic Practitioners allege their virtues to be specially developed.

We should be quite as willing to give the decillionth of a grain of opium as we are a dose of castor oil, provided it would do the work we want it to do. Medicine uses all remedies from every source. It is quite absurd to accuse us of prejudice against new remedies, or new forms or doses of remedies, whilst we are seeking them from every country under heaven, and daily experimenting upon them. But examination soon shows, in the first place, that the fundamental facts of Homœopathy are not to be relied on. Medicines do not act pathogenetically; that is, they have not the power, in some doses, of exciting in the human body the symptoms which they relieve in other doses. Mercury does not cause syphilis, nor does quinine cause ague. But mercury does habitually, if given to excess, cause stomatitis which mercury cannot cure, and quinine a ringing in the ears which no dose of quinine can relieve. The doctrine *similia similibus* is seen here to be a fallacy. Because some medicines sometimes produce certain symptoms under certain conditions, there is absolutely no reason for concluding that they can cure those symptoms under any condition. Besides, the Homœopathic allegations prove too much. If their doctrine be true, no disease can ever be relieved by medicine in ordinary doses. Then the observations made by Dr. Bayes in 1854 on the power of gallic acid in checking hæmorrhage would be false. Does gallic acid cause or cure bleeding? If it cause bleeding, his patient must have gone on bleeding under the large doses administered; or else if gallic acid in large doses checks bleeding, then it ought in small doses (such as we get in tea, for example) to cause bleeding, and all persons who take any astringent matter ought to bleed. The Homœopathic dogmas as to the virtues of inert substances in minute division, and of the distinction between medicines and aliments, and of the absolute interference of any medicine with any symptom, are contravened by the fact that the carbon and silica and chalk which we imbibe in small doses in London air, do not create the symptoms ascribed to those substances when minutely divided; and that if they did, no other medicine, Homœopathic or other, could take any effect whatever in London. Again, it is shown that Homœopathic medicines are utterly incompetent to produce the effects required in daily life (such as those, for example, which may be caused with certainty by castor oil); and that the only Homœopathic remedy of any notoriety is a concentrated solution of camphor, which has acquired some repute in cholera, but which has no claim to Homœopathic action, and is not given in Homœopathic doses. Besides, Homœopathic Practitioners, when ill themselves, or when their patients are really ill, do not scruple to resort to common medicines, which, if their theory be true, would aggravate all the symptoms.

So we oppose the appointment of any Homœopathic Practitioner on the ground that he is necessarily committed to a certain barren dogma, which admits of no modification; he is not a free man; he has embraced a certain creed, which, if honest, he must take with all its consequences. *We* are free. We repudiate *allopathy*, and *heteropathy*, *antipathy*, and all such absurd words. We study Nature with open eyes. The Homœopath comes in fetters. We oppose it further because Homœopathy has never added one fact to our knowledge of Pathology, nor one remedy to our Materia Medica—it is, as a system, "dynamic" and mystical, whereas Medicine is material and

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rational—it is indissolubly connected with animal magnetism and other sciences of the imagination—it is overloaded with fanciful dogmas, such as the origin of chronic disease in suppressed itch—it is eminently repugnant to the healthy progress of the human mind, and futile as a means of relieving human suffering.

THE WEEK.

The alteration in the Warrant of the Army Medical Department, as regards the future Surgeons of the Army, has created disappointment and distrust in all directions. The discontent is by no means confined to those who have entered the Medical Department of the Army since the Warrant of 1858, on the faith that its provisions would be maintained honourably and to the letter, but among all ranks there is a feeling of anxiety as to how far the change just made is a prelude to other changes to be made hereafter. In addition, the subject is being canvassed where the authorities can scarcely have supposed the Circular announcing the change would have ever penetrated,—in the principal Universities and Medical Schools of the kingdom; and students who had been turning their thoughts towards the competitive examinations for Army appointments, are now directing their views to other employments where terms of contract can be more depended upon than it appears the terms of an Order in Council can be. It is evident that this infringement of the Royal Warrant of 1858 has more important bearings than the mere loss of position to the Army Surgeons. This loss is, however, of greater moment than it at first appears to be. The Surgeon is in future to rank *after* all majors, instead of taking rank, as before, among the majors according to the respective dates of their commissions. This is not only a stamp of inferiority, but it gives a prior right to the combatant officer in the selection of quarters and other advantages. Moreover, every captain who receives a majority by brevet (and one has only to look at an Army List to see how many brevet major captains there are, and of how short periods of service compared with that of the Army Surgeons) will take precedence in garrison before the Surgeon, who was probably a member of a University, or Fellow of a College, while the captain was a schoolboy. Surely these are not measures calculated to place Medical Officers in the position to which the dignity of their Profession and great services justly entitle them (to use the arguments embodied in the Report from which the Royal Warrant of 1858 emanated), any more than they are likely to ensure to his advice and opinion that weight and influence which are necessary to secure the health and to maintain the efficiency of the troops. It would appear strange that such were the arguments used by a Royal Commission over which Lord Herbert, who now signs the present circular from the War Office, presided, were it not known that the Secretary for War is acting under a pressure which he cannot resist. The Medical Warrant has always been objectionable to the military powers, and they have succeeded in practically nullifying several of its provisions since its promulgation. The present is another impulse in the same direction and from the same source, and it behoves every Physician and Surgeon to be on the alert who feels an interest in supporting the dignity of an important class of their brethren, and the proper position of the scientific Profession to which they belong among the other departments of the State. The following is a copy of the document which has given rise to the above remarks:—

"CIRCULAR, No. 672.

"VICTORIA R.—Whereas it has been represented to us that it is expedient to amend that part of the 16th clause of our Royal Warrant of the 1st October, 1858, which assigns to Staff or Regimental Surgeons the relative rank of Major, according to the date of their commission. Our will and pleasure is, that Staff or Regimental Assistant-Surgeons who may be promoted to the rank of Staff or Regimental Surgeon on or after the date of this our Royal Warrant shall rank as Majors, but juniors of that rank; and that Staff or Regimental Surgeons who were commissioned as such before the date hereof shall continue to rank as Majors, according to the date of their commission.

"Given at our Court of St. James's, this 28th day of March, 1861, in the 24th year of our reign.

"By Her Majesty's Command,

"HERBERT."

Dr. Beale's third Lecture at the College of Physicians was delivered on Monday week. He began by a reiteration of his doctrines as to the nature of germinal matter, and its power of being coloured by carmine, and of formed material. He stated his belief that germinal matter increases by imbibition and grows from within outward; that its outer portion is converted into the formed material. That when a certain portion has accumulated, as in the case of a vegetable cell, part of it escapes through pores in the surrounding formed material, and grows and developes a new cell on some part of the outside of the pre-existing one. That germinal matter appears always and everywhere the same in the whole range of creation; formed material, on the contrary, everywhere different, inasmuch as it constitutes the bulk of organs and parts infinitely various. He then spoke of elementary parts, the lining units, which are often too exclusively designated by the word "cell;" and of elementary organs, observing that the organs of the larger animals differ from those of the smaller in the multiplication, not in the increased size of elementary parts, for these are often larger in small animals than in bulky ones. "Cells," or "elementary parts," are incessantly undergoing change, by virtue of currents bringing new supplies of nourishment to the centre, and then setting outwards. The distinction of *formed* from *germinal* matter in any "cell" or "elementary part" is sometimes abrupt (when it is called "cell wall"), sometimes transitional. A cell wall may not exist at all. Some elementary parts, as some of the protozoa (amœba, for example), may actually have no definite limitary membrane; and as the amœba has the power of putting forth projections, which may coalesce or separate, so may some elementary parts of the animal body; mucus, for example, the germinal matter of which may be seen thus to change under the microscope, while the viscid part of it is to be considered as formed material. When cell walls are distinguished they are often produced artificially by immersion in water. The formed material is always undergoing disintegration and solution, as was exemplified by the case of the red blood corpuscles. No cell wall can be demonstrated in these, which appear, nevertheless, to be denser outwardly than within. They do not become coloured by carmine, although the white ones do, and some very small smooth ones, and those of the embryo also receive the dye. In the frog the centre of the corpuscle takes colour, and it may be demonstrated that the outer layer of formed material is very thin in the winter. In Mammalia the white corpuscles probably split up or give off projections which separate and originate the red corpuscles. These grow till the germinal matter is exhausted. Then they probably accumulate in the so-called compound blood-corpuscle-holding cells, and are dissolved either into excrementitious or recrementitious matter. That the red blood corpuscles are masses, or corpuscles, and not cells, with definite cell wall, is further proved by the ready crystallization of the blood of the guinea-pig when left to itself and quite unmixed with water. The views of Schwann and Schleiden on the nature of cells was then discussed, and next Mr. Huxley's reproduction of Woolfe's theory: that organised matter begins as clear plasma, which grows and establishes *vacuoles* in itself, and that the intercellular substance or periplast, or cell wall, is more

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important than the endoplast, or cell contents. Huxley believes that the endoplast grows and divides, but after this remains inert and apathetic, while the periplast undergoes morphological differentiation. Virchow, on the contrary, believes that cells come from cells, and that the contents are active, the cell wall apathetic. Hughes Bennet believes that organisation begins with granules, which grow and attract around them other particles, constituting nucleus, cell and cell contents. Dr. Beale, on the other hand, believes in the central growth and multiplication of germinal matter, which changes into formed material. At all events, he observed, whatever theory be adopted, it must be consistent with the facts that the elementary parts may have a cell wall or none, decided cell contents or none, thick intercellular substance or none, nucleus and nucleolus or none, projecting fibres or hairs or none; and he believed that his theory gave the best explanation of the greatest number of these facts. The preparations passed round were liver cells from a mouse and from an old man; and sections of the tongue of a fœtus and of a girl of ten, intended to illustrate the fact of the existence of a much larger quantity of germinal matter in the young than in old tissue; and the formation of pus out of the germinal matter of epithelium after the application of a blister. Pus seems to consist of small spherical masses of germinal matter, covered with a thin layer of formed material. We are sure that Dr. Beale will excuse us if we observe that his enunciation of what he wants to teach is so simple and unmistakeable, that he may avoid a great deal of the repetition with which at present we fear that he fatigues himself and his hearers, and may get a great deal more of matter into his hour's demonstration.

A person named Thiselton, who described himself as a Medical and Operative Galvanist, and author of a pamphlet entitled "Modern Remedies *versus* Professional Prejudices: with some Remarks on his Newly-Discovered Process of Frictional Absorption," sued a Mr. Frewer for what we suppose must be called "galvanic" attendance, for he had attended him for eighteen weeks, applying galvanic wires in a bath, and he had also attended his wife and a Miss Clegg. Amongst the pleas for the defence, the 32nd Section of the Medical Act of 1858 was cited, which enacts "That no person shall be entitled to recover any charge in any Court of Law, for any Medical or] Surgical advice or attendance, or for the performance of any operation, or for any medicine which he shall have both prescribed and supplied, unless he shall prove upon the trial that he is registered under the Act." The learned judge left it for the jury to decide whether the plaintiff had held himself out as a Medical Practitioner, or was acting as Physician, Surgeon, or Apothecary; on which question the jury found that he had not. A verdict was accordingly taken for the plaintiff, with leave to move the Court on the question in reference to the Medical Act.

An inquest has been held at Belfast, on the body of a respectable woman who died of tetanus eighteen days after her first confinement. She was attended by a Practitioner whose card contained the following description:—"Mr. R. Johnston, Surgeon Accoucheur, &c., 117 Durham-street. Particular attention given to the Diseases of Women and Children," but who, by his own admission, is a non-registered Practitioner. There is not a particle of evidence that the poor woman's illness was caused by any malpractice of Mr. Johnston, and the jury returned a verdict to that effect. Yet it was quite right that an inquest should be held in this as in any other case, when reasonable doubts may exist as to the treatment pursued by a person who has not submitted to the examination test which the law imposes for the protection of the public. It is quite right, further, that Mr. Johnston, if he violate a law passed for the public benefit, should be made to feel its penalties. But we are glad to hear that, while the Belfast Physicians did not press the present case against him, the Association will proceed against him, under the Medical Act, for practising, though not registered. It would be unwise to allege that tetanus is a result of ill-treatment. Such an allegation might be used very unpleasantly against any man whose patient might have tetanus after an operation.

A curious question was decided by Vice-Chancellor Stuart on Monday: What is a sufficient proof of life in a newly-born infant? In the case in question, the infant moved just before birth, and there was slight pulsation of the cord after birth. The evidence as to respiration is doubtful, and consists in the fact that the chest was "arched." Dr. Freeman, the Accoucheur in attendance, believed that the child lived for several minutes, because of the pulsation of the cord, and that it died slowly from the severity of the labour. Dr. Robert Lee, whose ideas of the value of infant life are singular, made affidavit that the child was not born alive, and that before a child could be said to possess independent life, it must respire. Dr. Tyler Smith supported Dr. Freeman's opinion, and said that "a single vital act" was enough to prove the existence of life. The Vice-Chancellor adopted this common-sense view.

In reference to the Egyptian fever at Liverpool, Mr. Hunter, of Moffat, Dumfriesshire, calls to our remembrance an interesting communication inserted in the *Medical Times and Gazette* of April 21, 1860, in which he gives instances of outbreak of fever on the arrival of a vessel, although the fever did not affect any of the crew. "Missionary Williams," he says, "had learnt, in the South Sea Islands, to connect the outbreak of pestilential fevers with the arrival of some ship from the coast of Africa, though there might have been no case of fever on board, nor during the voyage, so that he was led to ascribe it to the coming together of different races; and that the same was believed to have been the case with H.M.S. *Growler*, with free labourers from the coast of Africa to the West Indies, in 1847. And thus, to point to the former history of the Egyptian frigate as an important part of the matter for investigation; for, *if* it be that there never has been a fever of the kind on board before, then, perhaps, Missionary Williams came *nearest* the truth after all in saying that 'contagion,' or 'infection,' is conveyed in, and given off from, the filthy skin of living persons."

The Managing Committee of the Fund which is being raised for the purpose of erecting a Memorial to the late Sir James McGrigor, Bart., "have succeeded in obtaining from Her Majesty's First Commissioner of Public Works a very eligible site *in St. Margaret's-square, Westminster, near the Abbey and Houses of Parliament*, where they propose to erect, as speedily as possible, a marble statue, on a polished granite pedestal, on which will be briefly inscribed the nature of those services (extending over a period of fifty-seven years, in every quarter of the globe) which acquired so repeatedly for Sir James McGrigor the warmest eulogies in the public despatches of the various General Officers under whom he served, especially in those of the late Duke of Wellington, who, on the 26th of July, 1814, when referring to the manner in which the Chief of the Medical Department had conducted that responsible and onerous position, concludes by saying, 'I consider him one of the most industrious, able, and successful public servants I have ever met with.' Sir James McGrigor was Chief of the Medical Department of the Army in the expedition against the island of Grenada; in the expedition under

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Sir David Baird from Bombay through the deserts of Thebes and Suez to Alexandria; and in the disastrous Walcheren expedition; moreover, he was present in the same capacity with the army in the Peninsula, from Ciudad Rodrigo to the final battle of Toulouse. He was also twice shipwrecked during his period of active service. To the Medical officers of the Army his name will always be associated with the two most invaluable Institutions which he founded and fostered until the end of his life with parental care,—one, an Assurance Society for granting pensions to widows; and the other, a Benevolent Society, which has been the means of distributing many hundred pounds annually, among the most necessitous orphans of Medical officers."

The Westminster Hospital Dinner passed off most successfully at Willis's Rooms, on Wednesday. The Chairman, Lord Charles Russell, made some capital short speeches, and he was well supported by the Vice-Chancellor P. Wood, the Dean of Westminster, Earl Grosvenor, and other gentlemen. The chief feature of the evening was the announcement of an effort in the direction of establishing Special Wards in General Hospitals, by founding one in the Westminster Hospital for diseases peculiar to women.

We defer until next week our report of the case of the Apothecaries against the Physicians, decided by Vice-Chancellor P. Wood on Wednesday against the Apothecaries, and in favour of the Physicians having the power to create a new order of Licentiates.

The following Circular has been issued relative to the reduction of the Regimental Assistant-Surgeons. In consequence of the discussion which took place in the House of Commons a few nights ago, it has been decided that no reduction is to take place in the regiments of Guards.

"Horse Guards, March 18, 1861.

"A reduction in the number of Assistant-Surgeons of regiments having been determined on, the General Commanding-in-Chief desires that the attendance at ball practice of Medical officers attached to regiments and Depôt Battalions, may, after such reduction, be dispensed with at all stations at home and abroad, except the East and West Indies, Ceylon, and China; and as the Secretary of State for War has sanctioned an increase of Staff Assistant-Surgeons for rifle practice at Gibraltar, Malta, Aldershott, Shorncliffe, Dover, Portsmouth, Plymouth, Dublin, and the Curragh, H. R. H. the Duke of Cambridge further desires that General Officers commanding, will take care that Staff Assistant-Surgeons only are employed on this duty, as soon as the additional officers of that rank arrive at the respective stations.

"By Command,

"James Yorke Scarlett, Adjutant-General."

The Tancred Studentships are four in number. They are tenable until the degree of Bachelor of Physic is obtained, and for three years after. The students must enter as members of Caius College, Cambridge, and keep terms there. They must undergo a test examination (not competitive) in the first two books of Euclid, in Arithmetic as far as Decimal Fractions, in Algebra as far as simple Equations, the Elements of Greek and Latin Grammar, the first three books of the Æneid, and in the Anabasis of Xenophon. The appointments are in the gift of the Master of Christ College, and the Master of Caius College, Cambridge, the President of the College of Physicians, the Treasurer of Lincoln's-inn, the Master of the Charter House, and the Governors of the Royal Hospitals of Greenwich and Chelsea. There is at present one vacant studentship. The income is about £107 a-year. Petitions must be presented not later than Tuesday next to B. J. L. Frere, Esq., 6, New-square, Lincoln's-inn.

FOREIGN CORRESPONDENCE.

FRANCE.

Paris, April 23.

"The Spring is budding, the husks are bursting,
And freely we breathe in the free open air."

In this inspired song of a fifth-rate German poet we Parisian Physicians heartily join; for the final departure of our esteemed country colleagues, who during winter infest this metropolis, and whom the mild breezes of April, and the melodious cry of the cuckoo, have at last recalled to their rural retreats and mineral springs, has been the greatest relief to us. Paris is, indeed, the great European waiting-room for patients as well as Doctors; and I gladly turn away from the intense competition which exists here in private practice, to one of the more satisfactory phenomena of Parisian Medical life, viz.—the New Anthropological Society, which was founded in May, 1859, by nineteen Physicians, amongst whom I may mention the names of MM. Isidore Geoffroy St. Hilaire, Martin-Magran, Gratiolet, Robin and Broca. This Society now numbers 70 subscribing Fellows, 26 foreign, 16 corresponding, and 4 honorary members. Such rapid growth of a Society formed for the study of the races of mankind, is surprising in a country where the success of all free,—that is, non-official,—learned Societies is mostly very indifferent. In the whole of France there is only one chair for Anthropology, that in the Museum of Natural History in the Jardin des Plantes; and the official learned bodies have no sections for this science. Perhaps this is the reason why the proposal of the nineteen, to form such a Society, was so readily responded to. The first President was M. Martin-Magran (1859), to whom Geoffroy St. Hilaire succeeded in 1860; and M. Béclard in 1861. M. Boudin, who is well known for his researches in Medical geography and statistics, is Vice-President. M. Paul Broca has been First Secretary from the beginning. A volume of *Transactions*, with plates, is published annually; this contains the minutes of the papers which have been read, reports, notes, and the discussions; and occasionally papers are also printed full-length, if they are of greater importance.

The first volume of these *Transactions*, which contains the proceedings of the Society from its formation until January 1, 1861, is of 600 pages, with eleven plates, and an analytical table of contents, which latter has been rendered necessary by the extremely various matter contained in this volume. The first part of the second volume has also appeared, and the second part of it is now preparing for publication; it will contain six plates, besides the following papers: 'On Classification of the Races of Mankind," by M. Geoffroy St. Hilaire; "On the Instruments made of Cut Silex, and found in the Diluvium of the Seine," by M. Gosse, *père;* "An Essay on Ethnic Crosses," by M. Péries; "A Parallel Between the Skull of the Laplanders and the Esquimaux," by M. Guerault; "The Welsh and the Celts," by M. Lagneau; "An Essay on the Races of French Australia," by M. Bourgarel. This table of contents shows that the Society is occupied with general as well as special questions of ethnology, history, archæology, anatomy and physiology, and, in fact, with everything that may promote the study of the races of mankind; the subjects of acclimatisation and the comparative pathology of the different races have also been amply discussed in the meetings of this Society, which is not at all exclusive, as there are nearly as many monogenists as polygenists in it, and every subject under discussion is treated in a strictly scientific manner from these two points of view, which gives always much interest and animation to the meetings. Amongst others the following subjects have lately been discussed: the ethnology of France; the ubiquity of man; the fossil man; the primitive races and their manufactures; the Kabyles and the fair races of Northern Africa; the non-cosmopolitisation of the races of mankind; the inferiority of hybrids and the permanence of types; the depopulisation of Australia and the extinction of races, etc. Out of a large number of "reports, notes, and instructions," I will only mention the papers of M. Primer-Bey, formerly Physician to the Viceroy of Egypt, "On the Druses of the Lebanon;" of M. Broca, "On the Anthropology of the

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Senegal;" of M. Rufz, "On the Anthropology of Tahiti;" Martin de Moussy, "On the Races of the Brazils;" and an interesting communication by M. Gosse, *fils*, "On the Habitations in the Marshes of the Swiss Lakes." This paper treats of the flight of the Autochthones of France, who were driven back by the invading Celts, whose weapons were superior to theirs; and the former were compelled to shield themselves in houses built on stakes in lakes; such habitations, in fact, as are even at the present day found at Venice and in Holland. The Celts were then beaten by the Cimbres and Teutones, who again had superior weapons; and were compelled to resort to the same means of protection as the Autochthones had done before. Even now remains of stakes and posts, which had been erected by these fugitive races, together with arms lost on their way thither, are found in the Swiss lakes.

Since the commencement of the current year the attention of the Anthropological Society has especially been directed to ascertain the relation between the volume and the form of the cerebrum in races and individuals. M. Gratiolet holds that the brain, considered as the organ of intelligence, entirely derives its functional power from the form, and not from the weight. This assertion was contradicted, and the perfectibility of individuals and races in regard to their intellect sought in the volume of the brain or the capacity of the skull; but a satisfactory result has not yet been arrived at.

THE FOREIGN MEDICAL SOCIETIES.

The number of Medical students here is generally from about 1300 to 1500, and there are quite as many Physicians and Surgeons from foreign parts, who come here annually in order to continue their studies in the large Hospitals, where, on the average, 8000 patients may be seen at one time, and to hear the lectures and follow the methods of the various celebrated Hospital Physicians and Surgeons. The influx of Doctors is, from some countries, so continuous, that they have found it worth their while to form societies, where they meet their countrymen and colleagues; and scientific meetings are also held, in which the differences between French and home Medicine are discussed. The largest of these Foreign Societies is that of the German Physicians, which was founded about thirty years ago, and which took a fresh start in 1844. The weekly meetings are held in the Rue de l'Ecole de Médecine, and a reading-room and library are open every day to its members. Its Transactions appear at irregular intervals in the *Gazette Hebdomadaire de Médecine et Chirurgie*, which is edited by Dr. Déchambre, and is now the most influential Medical Journal; and they are afterwards collected and published separately. Dr. Meding has for ten years been President of this Society, which is closely connected with the Leopoldine Caroline Academy of German Naturalists. There are besides Societies of Polish, Spanish, and Greek Physicians; but these do not publish their Transactions, and also admit non-graduates of Medicine. In 1851, some American gentlemen founded an "American Medical Society," which also possessed a reading-room and library; Dr. Johnson, of Ohio, was President. This Society at one time numbered from forty to fifty members; but last year it became so reduced in numbers, that it was dissolved, and the library presented to the Medical Faculty of Paris. The English Parisian Medical Society was founded in 1837, by Dr. Hughes Bennet, of Edinburgh, after the model of the Royal Medical Society of Edinburgh; and Dr. George Harley, who was President for some time, contributed much to the success of it; but, during the Crimean war, the number of members became so small, that it had also to be dissolved. The library was deposited with a resident English Physician here. At one period the German and English Societies held meetings in common; and the former would no doubt again be glad to amalgamate with the nucleus of English Medical men still here, who are at present without a scientific home.

THE ACADEMY OF MEDICINE.

In my next letter I shall give you some information about the present proceedings of the Academy of Medicine; to-day I will only mention the curious fact, that the proposal to baptize children *in utero* by means of a syringe, as is still done in some of the old Catholic States, has just been revived by a member of this learned body. Another gentleman, of the same congregation, has proposed to resort commonly to Cæsarean section, in order to save the soul of the children at all hazards, and to employ the syringe even before the fœtus was able to live! We can, however, scarcely wonder at such retrogressive metamorphosis of the Academy of Medicine, as already some years ago there were alarming signs of a deep disturbance of nutrition in it; for not unfrequently Fathers of the Church were quoted from the tribune as authorities against certain materialistic physiological doctrines!

THE ROOT OF GINSENG.

When, after the capture of Pekin, the French broke into the Imperial Palace, they found among other valuables some specimens of the rare and far-famed root of Ginseng; and Dr. Armand has lately given us some account of this medicinal plant, of which so many wonderful tales have been told. Its real name is Gin-sen or Nin-sen; "gin" or "nin" meaning apple, and "sen" health, power, potency. This root is as a remedy so highly esteemed in China, that it is almost valued at its same weight in gold. The plant grows in Tartary, and has, probably, small leaves, as the neck of the root, where it is cut off, when collected, is very narrow. At the neck the root divides into two parts, which are similar to long, thin radishes. When dried, they appear of a whitish yellow colour, a little wrinkled and semi-transparent, especially at the end, where they divide into small branches. When broken, the root has the same semi-transparent appearance. It is light and without smell, and tastes like liquorice-root, first sweet and afterwards rather bitter. When used, it is cut into very small pieces and boiled in a water-bath. The remainder may be used again, as is the case with tea. The decoction of one drachm to half-an-ounce is taken every morning before breakfast, for from three to eight days together; and sometimes it is also taken in the evening before going to bed. No change is made in the diet, nor the general habits of the patient, with the exception that tea is forbidden for, at least, a month, as by its use the beneficial effect of the Ginseng would be counterbalanced. This would lead to the supposition that the ginseng restores the digestive functions, which have been weakened by the immoderate use of tea. The Chinese do not believe that the root of Ginseng can prolong life, as it is never taken by old persons, nor is it given to children; but it is chiefly used by weakened men and youths, and it, therefore, seems to be an exciting, and probably aphrodisiac remedy.

AMERICAN FEMALE DOCTORS.

Some time ago the visitors of M. Piorry's Clinique in La Charité, were amazed to see among the crowd of students, who always throng to the wards of this most estimable and original Professor, two American ladies, thickly veiled, who had crossed the Atlantic for the express purpose of seeing and admiring the inventor of the plessimetre, and the science of plessimetry, as exercised by his own hands. M. Piorry, who is, above all, Frenchman and *galant-homme*, paid the greatest attention to the ladies, and showed them a beautiful case of splenomacrosy, a remarkable instance of broncho-syphiosis, an interesting patient affected with enterocarcinq, and an extraordinary case of angitromemphaxia. The ladies seemed to be quite familiar with the Professor's wonderful nomenclature, which it is the great object of his life to introduce into all systems of pathology of the civilized and uncivilized world.

AUSTRIA.

VIENNA, April 25.

THE ANNIVERSARY OF THE VIENNESE COLLEGE OF PHYSICIANS.

The above Society, which was founded eleven years ago, and the members of which are all graduates of this University, celebrated their anniversary on April 8. The oration was delivered by Professor Dr. Seeligmann, and had for its subject, "Adam Chenot and his Times." After alluding to the epidemics described by Thucydides, Seneca, Boccaccio, De Foe, Manzoni, Father Abraham a Santa Clara and others, the learned Professor adverted to the terrible plague which raged at Vienna in 1713, when, out of 12,000 patients, 9000 —among whom were 60 Physicians—died. At that time Van Swieten won his first spurs in the Medial Profession, and endeavoured to destroy prejudices, and to reform some of the

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most glaring abuses which then existed in the sanitary management. This was the time when the Jesuits objected to the institution of an Academy of Sciences, when the development of German language and science was thought dangerous to the State, and German literates were believed to be no better than Atheists. One of the pupils of Van Swieten was Adam Chenot, the son of a miller, who was born in Luxemburg in 1722, and who in 1746 first came to Vienna to study Medicine. In 1755 he went to Transylvania, where the plague then raged, and where the most terrible confusion prevailed. He there did all in his power to bring order in the chaos which he found; and in 1766 described that epidemic in a "Tractatus de Peste," and also gave an account of his endeavours to mitigate the evils consequent upon plague, and the means he used to prevent the spreading of the disease. This work had an immense success, and the Empress Maria Theresa rewarded the author with a considerable annuity. At this time the officials, however, began their intrigues against him, and did all they could to bring him into disgrace. In 1776 a new epidemic of the same kind broke out in Transylvania, and Chenot was sent there with full powers to use such means as he thought best to put it down. His arrangements had again the most salutary effect. In his "Rules against Plague" (1779), Chenon protested against the permanent interruption of intercourse, and the destruction of such things as were believed to be infected with the contagion; and recommended that the frontier should be opened at a time when plague was not prevalent; while such things as had really been infected should be merely washed and aired. So many and so extensive reports were made upon his proposals, that, if it had been possible to drown them in ink, this would certainly have been effected: two years after his Rules had been received, they were still buried in the Government offices. When the well-meaning Emperor Joseph ascended the throne, a new impulse was given to liberty of thought. This ruler once said to Van Swieten, that fanaticism should henceforth only be known in his States by the contempt he felt for it. He recalled Chenot to Vienna, made him Sanitary Councillor, and requested him to defend his views against the Medical Faculty of Vienna. In the dispute which followed, Chenot asserted that only the patient and such things as were touched by him, but not merchandise, etc., were contagious; but he could not prevail upon the Faculty to adopt his views. His theses were not even printed, and if they had not been recorded in M. Schraud's work on Plague, they would most probably have been entirely lost to us. In 1786 a new epidemic broke out in Transylvania. The Emperor Joseph then sent for Chenot, who had become prematurely old: he took him into his own closet, and wished him to write down his "Rules against Plague;" but the hands of the old man trembled so much, that he could not hold the pen steady, and he therefore dictated them to the Emperor, who himself wrote them down, immediately sent them as a despatch to Transylvania, and ordered them to be carried out in all their details. In 1787, Chenot finished his last work, "On the Nature of Plague; its Contagiosity and Propagation, and the Means to be Used for its Prevention and Final Destruction." He died in 1789, and the work just mentioned was only printed nine years after his death. M. Schraud, in his "History of the Plague at Smyrna," remarked that if Chenot's work had been known in 1795, more than two thousand plague-patients might have been saved.

Professor Seeligmann closed his eloquent oration with the request that every Medical man would do his best to improve the sanitary condition of this city. He said that air, light, earth, and water, the four elements of the Ancients, are even now the elements of health of a population; what is necessary for Vienna is good air, plenty of light, wholesome water, and proper drainage. For the first time it had now been officially said in Austria, "Knowledge is power" (an allusion to a speech recently made by the Rector Magnificus, Professor Oppolzer); and such knowledge was of chief importance which tended to preserve the health of the people.

UNIVERSITY OF LONDON.—Dr. Jenner has been elected by the Senate, Examiner in the Practice of Medicine, in place of Dr. Billing; and Professor Redfern Examiner in Anatomy and Physiology, in place of Mr. Kiernan.

GENERAL CORRESPONDENCE.

THE FEVER AT LIVERPOOL.

LETTER FROM DR. CAMERON.

[To the Editor of the Medical Times and Gazette.]

SIR,—The circumstances attending the outbreak of Fever from which the Southern Hospital has recently suffered, have given rise to doubts as to the nature of the disease under which the Egyptian sailors laboured at the time of their admission, and it has been asserted that they were suffering, not from dysentery, but from a malignant form of exanthematous typhus. How else, it is argued, can we account for the communication of the disease to the inmates of the Hospital? How can we otherwise explain the fact that casual visitors on board the ship, and that the attendants at the Baths, were also struck down by fever?

I trust to show, even in a few remarks to which my limits confine me in the present communication, that this occurrence, seemingly a Medical paradox, can be explained by the circumstances in which dysentery prevails and the difference existing between the races of men with respect to their susceptibility of the two diseases.

As already mentioned in your columns, we received into the Southern Hospital between February 25 and 27, thirty-two Egyptian sailors, forming a part of a crew of 350 who had recently arrived in this port in the *Scheah Gehald*, after a severe and tedious passage of three and a-half months from Alexandria. Their condition was filthy in the extreme, and their bodies and loose, flowing Oriental garments, swarming with vermin, emitted the most offensive effluvia. Several of them were but slightly indisposed, their only complaint being pains in the limbs, and more especially in the feet,—effects which I attributed to the inclemency of the weather to which they had been exposed. By March 1, these men were walking about the wards, and were so far recovered that Medical treatment was considered unnecessary, a generous diet and the comforts of the Hospital being deemed sufficient for their complete restoration. Three laboured under frost-bite without any remarkable constitutional disorder. A few were suffering from pulmonary affections which were severe in two instances, pneumonia and pleurisy. About a dozen were labouring under diarrhœa or dysentery. Most of these cases presented a serious aspect, being of an acute but asthenic character. The tongue was red, glazed, and in some instances dry. They were purged ten to twelve times in the twenty-four hours, the action of the bowels being accompanied by severe tenesmus. In none was there tympanitis, and in a few only pain on pressure. On inquiring, through the interpreter, as to the seat of their sufferings, they pointed exclusively, and with much gesticulation, to their abdomen. In the worst cases the pulse varied from about 100 to 120, the skin was hot, and thirst was complained of. In no instance was delirium noticed. (Having no notes of these cases, the above particulars are given from memory.)

The progress of these patients, as well as that of their comrades, was very favourable, as will be seen by the following results:—17 were discharged on March 8; 6 were discharged on March 18 (these had been ordered to be discharged on the 16th); 1 was discharged on the 23rd; 4 were removed to the Workhouse on April 4: of these three were suffering from Surgical disease, and 1 slowly convalescing from pleurisy.

Of the 32, 4 died: 3 from dysentery, and 1 from phlegmonous inflammation of the hand and arm, accompanied by abscess.

The outbreak of fever commenced on March 4, the Senior House-Surgeon being the first person attacked; the next, one of the nurses; and in the course of a few days some of the patients; the last was the senior porter, who took ill on March 29, and is now recovering,—in all 25 persons (5 children, 10 years or under, and 20 adults), directly or indirectly connected with the Hospital were affected. The disease in every case assumed the characters of true typhus, with its well-known exanthematous eruption. In all there was more or less cerebral disturbance, and in many, deafness from an early period. Diarrhœa was present in three cases

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(adults), in two of which it was very slight (3 to 4 stools), appearing and disappearing the same day, and at an early period of the disease, the bowels during the remainder of the attack being confined; in the other, the diarrhœa was more decided, but easily kept in check by opiates. The fatal cases, three in number, were unattended by this symptom. The bowels in the other patients required the occasional administration of purgatives.

Of the Egyptian sailors remaining in the Hospital after the outbreak of fever, two only suffered from symptoms which could in any way be referred to the prevailing epidemic; one who, convalescing from dysentery, was seized with rigors, followed by cerebral excitement,—symptoms which passed off in a few days with copious perspiration. In the second, who was recovering from pleurisy, the pulse quickened, the skin became hot, and the appetite became impaired; there was not, however, the slightest cerebral disturbance. Convalescence returned slowly, and without any critical symptoms. In neither of these cases did the tongue exhibit the typhoid character.

Now, as to the origin of this epidemic. The hygienic condition of the Hospital after the admission of the Egyptians, seems at first sight to offer a satisfactory explanation of this melancholy visitation; for the concentration in a limited space of so many filthy individuals, several of them suffering from copious and offensive discharges presented the elements which concur in the development and propagation of typhus: a view which received further support from the fact that typhus is endemic in Liverpool, and that one of its favourite haunts is the locality in which the Hospital is situated. But a more probable explanation is, I believe, to be found in the connexion—the relationship, that exists between typhus and dysentery, and under certain circumstances their probable *convertibility* the one into the other.

Numerous instances can be adduced in the histories of the epidemic occurrence of dysentery to show that this disease and fever are not unfrequently associated under the influence of the same exciting causes, and that in many instances the one may succeed, or become superadded to the other; and it is a matter of interest in the present question to know that, as a general rule, dysentery makes its appearance first, and the causes continuing still in operation, fever follows in its wake. But in the presence of the circumstances that co-operate in the development of the septic agent, the specific form it will assume depends also upon conditions having more especial reference to the recipient. Amongst these modifying circumstances the race of the sufferers seems to hold a prominent position, so that the epidemics of fever which commit such havoc in our gaols and emigrant-ships are replaced in the dark races by a no less fatal dysentery. For evidence to this fact we have the eminent authority of Dr. Copland who states in his Dictionary, (vol. i. p. 699):—

"It may be here mentioned that the dark races, particularly negroes, are more liable to dysentery than to any other disease; that it assumes an extremely low or putrid form in them when confined in ill-ventilated situations; and that when a number, even of those in health, are shut up in such places . . . . . the systems of those thus circumstanced are thereby infected, and instead of an infectious typhus, which would be the result in the European constitution, a putrid dysentery, spreading rapidly through all breathing the impure air is developed." There is in this passage an obvious application to the occurrence under consideration, and it enables us to understand how the poisonous agent generated in the over-crowded Egyptian frigate communicated typhus to our unfortunate countrymen. But it must not be inferred that dysentery in the dark races will, in every instance, give rise to typhus in the white; but simply, that under the influence of circumstances with which we are as yet unacquainted, but which can be probably referred to imperfect hygiene, the one disease becomes the analogue of the other. Nor is this inconsistent with the effects of other animal poisons; for instance, of a certain number of persons, all exposed to the same source of contamination in the Surgical wards of an Hospital, one will be seized with erysipelas, another with pyæmia, while a third may suffer from Hospital gangrene. So again, the virus of a body undergoing dissection may be carried to a lying-in woman to whom it communicates some form of puerperal disease, and from this new focus of infection may arise erysipelas. It is true that the black races are themselves subject to typhus, but in a less degree than the whites, this disease being especially one belonging to the northern and temperate climates.

If this view be accepted as the correct explanation of the occurrence to which it relates, it is easy to understand how the attendants at the Public Baths became affected by fever, although the Egyptians who visited the Institution were themselves free from disease. The former were in the position of individuals in perfect health, suddenly brought into contact with others who were saturated with the poisonous miasm, to the noxious influence of which they had, from gradual exposure, become insensible. This result is consistent with Claude Bernard's experiments, which show that, within certain limits, the poisonous action of vitiated air may be resisted when the living organism is gradually brought under its influence,—a physiological truth practically illustrated by the fate of judges and juries during the celebrated "Black Assizes."

I am, &c.

J. Cameron, M.D.,
Physician to the Liverpool Southern Hospital.

Letter from Dr. Edwards, Malta.

[To the Editor of the Medical Times and Gazette.]

Sir,—I have read with great interest the letter of your Liverpool correspondent, published in the number for April 6, when he gave a short and graphic account of the terrible onslaught made by typhus fever on the unhappy people who came in contact with the crew of the Egyptian frigate *Scheak Gehald*. If you think this letter worth publication, your readers will find in it the sequel of the story. I should scarcely be wrong if I termed it the second act of a drama of which the first was placed in Liverpool; and who shall say that the third may not now be enacting in Alexandria?

When the Southern Hospital was cleared out in March last, seventeen of the sick men belonging to the above frigate, together with the bulk of her original crew, were shipped on board another Egyptian frigate, the *Voyageur de la Mer*, a bran new iron ship, which sailed for Alexandria on March 9. Altogether there were about 600 people on board. Of these, the sailing captain, seven engineers, three passengers, the cook and steward,—in all thirteen,—were English: the rest were all Egyptians, or, at any rate, Orientals. This vessel met with bad weather, and put into Falmouth for repairs on March 13, where she stayed until the 20th. On Monday, the 25th, she got to Gibraltar. Early on the morning of the 30th she arrived at Malta, after a run of three days fifteen hours, and a few hours later I went on board. Such a receptacle for dirt I hope never again to set foot in. I should waste time and paper were I to attempt a description.

I found the captain ill of fever, the nature of which I did not try to make out carefully at the time, as the cabin was too dark and his person too dirty. Three of the engineers were also ill, and about thirty of the natives, men and officers included. Of the natives, some had been ill as long as thirty days, *i. e.* they had been sent on board ill out of Hospital at Liverpool. On the voyage out, according to one account, thirteen, and according to another twenty-seven, of the Egyptians died; whether they belonged to the *Scheak Gehald* or the *Voyageur* I know not. The native doctor on board ascribed these deaths to the effects of cold and exposure. This may or may not be the case; but I have found out that on two occasions at least the woodwork of the vessel about some portions of the machinery caught fire: the hose was turned on, and water pumped over the burning mass to such an extent that the poor sick wretches lying all about were deluged by showers which they were too ill to retreat from, and, for aught I know to the contrary, some of them may have been drowned.

I had the captain and three engineers brought ashore to lodgings, and some of the worst cases among the crew I caused to be sent to the Civil Hospital; and about these I may state, in a few words, that I did not form any opinion as to the nature of their disease. It was not typhus as I have seen it among Europeans. The pulse was quick, over 100, in all; the tongue was white and swollen; they looked very stupid, miserable, and woebegone; they had watery eyes and great debility, and they complained of headache. I could not say that they had typhus from what I remember of them. There was no death among them while they stayed here, and in a few days they were put on board

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again and carried off to Alexandria. On April 1 I had the cook and steward removed to Hospital, when the former died in two days with symptoms resembling delirium tremens. I think it not unlikely that he had typhus. One of the cases that recovered looked very like a case of delirium tremens for two or three days.

Dr. Pisani, of the Civil Hospital, tells me that many of the crew of the *Scheah Gehald* were ill under his care while the vessel passed through here on her way to Liverpool; and he remembers distinctly that one of them had fever, but he did not make out its nature. Indeed, true typhus is never seen here except when imported; and it is not improbable that Dr. Pisani has never seen a case in his life. Of the cases that I sent to him, the one that seemed to me most like typhus got rapidly better in four or five days. Whatever might have been the disease of the Egyptians, the Englishmen had most undoubted typhus. The prominent symptoms were rheumatic pains; pulse from 120 to 130; tongue large and moist, and white at first, later on dry and brown; suffused conjunctivæ; low muttering delirium; constant attempts to get out of bed; deafness; confusion of thought; great tremor of the lower jaw in speaking; diarrhœa during the first week; large quantities of pale urine; copious mulberry rash making its appearance somewhere from the sixth to the eighth day, and afterwards sudamina.

The captain died on the morning of April 2. He went ashore at Gibraltar, and slept there one night. I heard that he was reported there to be suffering from gastric fever; and one of my cases had a little vomiting. As near as I can make out, he must have died between the eighth and tenth day of his disease. The rash disappeared about twenty-four hours before death, and during the same time he was comatose, with pupils widely dilated; but on the previous day the pupils were as contracted as those of a man poisoned by opium. With a view to make the diagnosis certain, I examined, post mortem, the lower part of his ileum and the mesenteric glands. They were healthy. The spleen, too, was very firm and not large. The three engineers all recovered. One case was very severe. The fourteenth day was the turning point of the disease in them. The steward, in Hospital, soon recovered; he had *not* typhus. The three passengers left the *Voyageur* at Malta, and went on to Alexandria in a few days; and I have since heard from them that two more of the engineers and two of the passengers are lying seriously ill with symptoms of *gastric fever*. One of the passengers, a lad of about 16, was highly delirious. I purpose writing to Alexandria to inquire about these cases.

I have read a letter from Dr. Heslop, of Birmingham, in a recent number of the London *Times*, in which he expresses his opinion that the Egyptians must have had typhus while in Hospital at Liverpool, only that it was not recognised by the Staff there on account of the colour of their skin and the impossibility of making out the symptoms through ignorance of their language. This may or may not be the case; but, while fully allowing the novelty and startling nature of the doctrine imputing to the virus of one disease the capability of inducing in others a totally different disease, I maintain that we have yet to prove that these Egyptians had typhus, and the records of the Southern Hospital ought to furnish us with sufficient data.

I am, &c.

Malta, April 19. St. John Edwards, M.D. etc.

Letter from Dr. Williams.

[To the Editor of the Medical Times and Gazette.]

Sir,—I send you a history of the case of the attendant at the Paul-street Baths, who died of the fever which has been recently amongst us, in doing which, I have endeavoured to give, without comment, a faithful account of what I observed.

On March 7, I was requested to see this man, who stated that he felt very unwell since a number of Egyptians (nearly 400) had used the baths; he thought he had caught something from them, as nearly fifty were so ill as to be unable to leave the baths until removed in cars. He also said that he had taken a bath two or three days before I saw him, hoping to get rid of his sickness.

He had a quick pulse, hot skin, pains in his limbs, and a slight headache; tongue clean and moist, appetite good, bowels and kidney acting regularly.

8th.—A papular eruption appeared over the whole body, chiefly on the trunk, resembling small-pox (he had been vaccinated when a child), pulse 100, skin hot, tongue clean and moist, appetite good, bowels and kidney acting regularly—slight headache.

9th.—Many of the pimples have become vesicles, but not all, and a few only of any size; all other symptoms the same except the pulse, which has risen to 110.

10th.—No more vesicles, those of the previous day have all flattened; pulse 110, skin hot, slight delirium when left alone, but perfectly sensible when spoken to; tongue clean and moist, appetite good, bowels and kidney still acting freely.

11th.—Not the slightest appearance of either pimples or vesicles, but the trunk is covered with an eruption of maculæ, no change of any importance took place after this, he became gradually weaker and the pulse quicker, and the delirium more constant, until he died on March 15.

The tongue remained moist all through, although a small patch in the centre became brown the day before he died, at which time also, the bowels ceased to act, and the appetite failed—but he was perfectly sensible to the last moment when spoken to.

There was almost complete loss of muscular power, and the pulse had become extremely rapid and feeble, in fact throughout the whole course of the fever it was the rapid pulse that chiefly indicated danger. There was not the slightest effort at recovery, but steady downward progress.

On March 8 he commenced taking quinine in two-grain doses every four hours, and this was continued until death, with the addition of wine, brandy, ale, coffee, eggs, etc.

I am, &c.

D. M. Williams, L. K. and Q.C.P.I.

3, Norton-street, Liverpool, April 22.

Dr. Robert Lee and Craniotomy.

Letter from Dr. Druitt.

[To the Editor of the Medical Times and Gazette.]

Sir,—I learn from the report in your last Number, that Dr. Robert Lee, during a debate on Chloroform at the Royal Medico-Chirurgical Society, took the opportunity of expressing his disapprobation of the use of chloroform in parturition, of the "doctrines" advanced at the Obstetrical Society, and of the practice pursued by myself in endeavouring on a certain occasion to save the life of an infant and avoid the operation of craniotomy.

I can only lament Dr. Lee's fanatical opposition to all improvements in obstetric practice, and in particular to the use of chloroform as a means of assuaging the sufferings incidental to parturition. But it is unnecessary and useless to argue this point. Women who have taken chloroform during labour know whether it gives them relief or not; and if it does, they will not allow the dictum of any man to deprive them of so great a boon.

Neither does the Obstetrical Society require any defence. So long as it continues its present course of working out every possible improvement in physiology and practice, so long will it flourish, in spite of the inevitable hostility of Dr. Robert Lee. But I beg to be allowed to say a few words, in the interest of science and humanity, about that particular operation for craniotomy which led to Dr. Lee's criticisms on myself.

The mutilation of a living infant within its mother's womb is a thing so horrible and demoralising in itself, and so repugnant to the entire frame of mind which ought to animate members of our Profession, that nothing but the direst necessity can excuse it; and there is no accoucheur fit to be entrusted with the life of a dog, to whom the possibility of avoiding it (so far as may be, without compromising the more valuable life of the mother) is not a matter of deep and conscientious investigation. Not only was it not surprising, therefore, but quite in the order of things that, when the Obstetrical Society was instituted, the subject of craniotomy should be early considered. It was so: the "Abolition of Craniotomy when the Fœtus is Living or Viable," was the title of one of the first papers contributed to the Society's *Transactions* by the very able Physician who now fills the President's chair. The tone and object of that paper are creditable in the highest degree, and in exact accordance

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with the spirit of a Profession whose duty it is to save life. About that time, happening to meet with a case bearing on the question, I sent an account of it to the Society as a contribution to the mass of facts; and this case (published in the Obstetrical *Transactions*, vol. i., p. 81) was the object of Dr. Lee's criticism. Let me give the facts in a few lines, and then ask whether I acted rightly or not?

I was called to a woman in her sixth labour. Three out of her five previous children had been born alive, though with difficulty. Ergot and the forceps had failed in this case to bring down the head, and something must be done. What should that be? Should the child be mutilated, or the attempt be made to extract it alive by turning? There was no danger to the mother; so I was morally bound to try to save the child. But the attempt failed. The child gasped and died during the efforts to extract the head, which was large and hard as a cricket ball. So it was craniotomized at last. Had it been smaller and flexible, it might have been pulled through alive, like three others of the woman's children.

Thus, then, an attempt to save an infant's life without risk to its mother calls down the disapprobation of Dr. Robert Lee. With all respect for him, I am compelled to say that his whole teaching on the subject of the Forceps and Craniotomy, as contained in his published "Lectures" is much to be deprecated. It is not too much to say that such teaching is a public calamity. Every difficulty connected with the use of the forceps is exaggerated; lubberly and inefficient instruments are recommended, having their blades covered with leather, and handles so short that the operator may have no force; the most cruel and unreasonable delay advocated in the use of this life-saving instrument; the head directed to lie a long time on the perinæum; long forceps deprecated; poor women to be allowed to go on hour after hour with painful and exhausting parturient efforts, and no chloroform to soothe them. Cowardice with the forceps, boldness in craniotomy; such, I regret to say, is the tendency of the teaching of Dr. Lee, who now argues against an attempt to avoid the mutilation of a living infant. As for his practice, another generation will regard it with the same feelings with which we now look upon the barbarities of Mediæval Surgery. It is lucky for him that no Coroners' inquests are held on the remains of the children whom he mutilates.

He goes out of his way to attack those who never meddle with him. He cannot complain if others claim the same right of criticism which he exercises so freely. With the profound conviction, then, which I entertain that his opinions on the forceps and craniotomy, and his hostility to chloroform, are in every way injurious to the minds of the young Practitioners to whom our wives and children may be entrusted hereafter, I should really be wanting in common humanity if I were to keep silence, when I have been, as it were, challenged to speak.

I am, &c.

37, Hertford-street, W., April 23. R. Druitt.

WILL-MAKING BY DOCTORS.

Letter from Dr. Wilde.

[To the Editor of the Medical Times and Gazette.]

Sir,—Some months ago you introduced into the pages of your Journal the evidence of Dr. Budd given in one of the London law-courts in the case of Potts *v.* Potts. On the 31st of December last I addressed a letter to you on the subject which was printed in your issue of January 5. In stating what I believed to be the proper course for a Medical man to observe in such instances as that alluded to, and which, in Ireland, we were in the habit of pursuing, I said, "In all such cases we direct an attorney and the friends and relatives of the sick person to be sent for. This saves a world of trouble to the Medical man, keeps him out of family squabbles, prevents an exhibition in the witness-box, and, in my mind, upholds a high tone of Medical ethics." The case has lately been tried in the Court of Probate here, and has ended in an arrangement having been come to between the contending parties.

In your last number you say, under the head of "Hibernian Journalists *v.* Dr. Budd," "some of the Irish newspapers have made a fierce attack, after their manner, on Dr. Budd, on account of his having made a will for a dying man, by which the testator bequeathed his property in a manner not approved of by newspaper writers." I have not seen, nor have I been able to discover, where the articles referred to in your leader appeared, but I read with attention the case as published at length in the *Daily Express* for April 6th and 8th, containing the statements of Mr. Brewster for the plaintiff, and of Mr. Whiteside for the defendant, and the examination of the witnesses in support of the will. At that trial Dr. Budd refused to appear, a circumstance regretted both by the learned judge and the lawyers on both sides, but the law, as it at present stands, does not compel a witness to appear upon the *subpœna* of our Court of Probate. During the evidence given on the second day of trial, a discussion arose between the judge and Mr. Brewster, respecting the non-production of Dr. Budd, when the former said, "For myself, I say, I think no verdict can be satisfactory without his personal presence. I consider it very much to be regretted that we have not Dr. Budd here, when so much depends upon the evidence of that gentleman, his refusal to come will throw a very great doubt upon the transaction;" and again in another place, Judge Keating said, "I really am sorry for the sake of Dr. Budd himself, if he is as respectable a man as he is represented to be, that he did not come here and justify his conduct on this occasion." Mr. Brewster remarked that if Dr. Budd "could have been forced to come by any process of law, he would have been forced: I can state that most distinctly."

No doubt, the eloquent advocate for the mother of the young man whose property was willed away to the person described in the last *Medical Times and Gazette* as his "mistress," did animadvert in strong terms upon the conduct of the Physician who volunteered to draw the will; but I have no desire to prolong this letter, or increase the irritation produced in the minds of those most deeply interested either in purse, character, or feeling, by quoting Mr. Whiteside's statements, none of which, coming from an advocate, bore with them the rebuke of the calm expression of opinion by the judge. You justly state that when a patient is dangerously ill, it is the duty of the Medical attendant "to suggest that he should settle his affairs, both worldly and spiritual, and that he should have the benefit of legal and clerical counsel." It is because Dr. Budd did not suggest to the dying man to have these benefits, the more especially when they were within his reach and subsequently procured, that an Irish judge and Irish lawyers expressed an opinion in which I think I may say the Medical Profession, the press, and the public at large have concurred.

I am, &c.

Dublin, April 23. W. R. Wilde.

CONSULTATION WITH HOMŒOPATHS.

[To the Editor of the Medical Times and Gazette.]

Sir,—In the current Number of the *Medical Times and Gazette* a "Provincial Physician" has expressed the following opinion, that, in any case where a fellow-practitioner shall hold tenets which we conscientiously believe to be a tissue of absurdity, we are to call him all sorts of names, and to refuse to meet him. As this rule will be somewhat difficult of application, will your correspondent be kind enough to answer the following queries:—

We have in this city several highly respectable gentlemen, who prescribe potassæ hydriodas in every stage of syphilis, and who look upon mercury in any form as a poison. I conscientiously believe the tenets of these gentlemen, *quoad* syphilis, to be a tissue of absurdity. Am I to refuse to meet them in consultation?

We have also a much respected Practitioner (and not more so than he deserves) whose only treatment of strangulated hernia is repeated doses of black draught. I conscientiously believe this gentleman's tenets to be a tissue of absurdity. Am I to refuse to meet him?

We have besides an old and celebrated gentleman, who can recognise only one disease and one remedy, viz. gastro-enterite and pulv. Doveri, gr. v. ter quotidie. I conscientiously believe this gentleman's pathology and treatment to be a tissue of absurdity. Am I to refuse to meet him?

We have also a rising Physician, whose prescriptions will frequently contain half a score or more ingredients, and each ingredient in a large dose. I conscientiously believe this

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Physician's tenets, *quoad* mixtures, draughts, and pills, to be a tissue of absurdity. Am I to refuse to meet him?

We have also several gentlemen who have no faith whatever, or, at any rate, very little, in physic, and whose only treatment consists of *ptisans* and *placebos*. I conscientiously believe the tenets of these gentlemen to be a tissue of absurdity, "if not, on the part of many, of wilful imposture." Am I to denounce these gentlemen, and to refuse to meet them in consultation?

We have also a widely known and respected Physician, who seems to think that the only way to learn female complaints is to peep up the vagina. I conscientiously believe this Physician's tenets to be a tissue of absurdity. Am I to refuse to meet him, and to call him a quack?

We have besides—but I think I have asked enough. Will your Provincial Correspondent be kind enough to say what I am to do in the above and similar circumstances? for, most assuredly, all Medical absurdity is not monopolized by the Homœopaths.

I am, &c.

PROVINCIAL PHYSICIAN No. 2.

Manchester, April 26.

POOR-LAW MEDICAL REFORM.

LETTER FROM MR. GRIFFIN.

[To the Editor of the Medical Times and Gazette.]

SIR,—Some weeks have elapsed since I requested permission, through the medium of your Journal, to address the Poor-Law Medical Officers. During this time I have been actively employed in preparing evidence to lay before the Select Committee of the House of Commons on Poor-Law administration. I trust many of my brethren have been similarly engaged, and that such a mass of evidence will be laid before the Committee as must convince the most sceptical member of it that extensive changes are needed in the Medical Department of the Poor-Law administration.

On the 18th of April I received a letter from the Poor-Law Board in reply to one I sent to them requesting information as to the time when Mr. Abel Smith's return of the salaries of the Poor-Law Medical Officers up to Lady-day, 1861, would be presented to the House of Commons, and also when I might expect to be summoned to give evidence before the Select Committee. Their reply is as follows:—"I am directed by the Poor-Law Board to acknowledge the receipt of your letter of the 10th instant, and to state that the return to which you refer is in course of preparation, and will, it is expected, be presented to Parliament within the next fortnight. I am directed also to state that the President of this Board is unable to inform you as to the time when you may expect to be called before the Select Committee on the Poor-Law. He thinks it probable, however, that the Committee will not be prepared to enter upon any inquiry on the subject of Medical relief within a month from this date."

I have received one guinea from Dr. Brown, of Rochester, in aid of the funds of the Association. This is his sixth donation of a like amount. Had the Poor-Law Medical Officers done likewise how different would have been our position! I have also received subscriptions from the Officers of two Metropolitan and a few Country Unions, but the entire sum received this year (£50) has only enabled me to pay off the old-standing bills and meet the current expenses of the Association, leaving me still in debt for printing the last Draft Bill. Under these circumstances I have not felt justified in incurring fresh liabilities by printing the mass of evidence I have collected, which I greatly regret, as its perusal might assist those gentlemen about to give evidence.

As a little statistical information may be interesting to your readers, I will give you the copy of a note appended to one of the tables which I intend to lay before the Select Committee: "During a period of six years the average duration of illness in —— district has been 5 weeks, 3 days, 9 hours; average number of doses of medicine to each patient, 36; average number of attendances at the patient's home, 8·3; ditto at surgery, 1·3; average payment for the above, 1s. 10d., which includes the payment for operations, midwifery, and accidents. The severity of many of the cases is proved not only by the average duration of illness, but by the mortality, which averages 1 in 19·9. If the deaths here recorded be a fair specimen of the general mortality amongst the sick poor throughout the kingdom, it will appear that the Poor-Law Medical Officers alone return one-sixth of the entire deaths of the whole of England and Wales," proving that the subject is one not merely affecting the Poor-Law Medical Officers, but the poor and the rate-payers generally.

I am, &c.

12, Royal-terrace, Weymouth, April 27. RICHARD GRIFFIN.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

TUESDAY, APRIL 16, 1861.

DR. COPLAND, President, in the Chair.

Mr. NUNN read the following Report, by himself and Mr. HULKE:—

ON DR. BROADBENT'S SPECIMEN OF HERNIAL TUMOUR.

It appears that the intestine strangulated has been pushed through the site of the internal ring, carrying with it the neck of the sac, or, at least, that part of the neck of the sac constituted by the peritoneum. The whole of the peritoneal sac was not returned; about one-half remains in the inguinal canal. The sac itself evidently contained much serous fluid. After being pushed beyond the abdominal wall inwards the bowel had fallen a little inwards, so that it lay behind the conjoined tendon and was consequently thereby prevented from returning again into the inguinal canal, it became, as it were, blocked. The gut had become slightly adherent to the sac in the immediate neighbourhood of the constricting neck. The neck of the peritoneal sac was much thickened and presented towards the bowel an exceedingly sharp and rigid edge. The spermatic cord was wedged between the sac and the edge of the conjoined tendon. In short, the essential feature of the case is that the bowel carrying with it the peritoneal sac entered the cavity of the abdomen and was prevented from again making its exit through the internal ring by becoming entangled between the peritoneum and conjoined tendon.

Mr. SPENCER WELLS exhibited

TWO OVARIAN TUMOURS REMOVED BY OVARIOTOMY.

The first he had removed from a woman, 41 years of age, in the Samaritan Hospital, on the afternoon of the meeting. There had been very firm adhesions, and the woman had long been in a low state of health. The tumour was an ordinary compound cyst, but with walls of unusual vascularity. The second tumour he had removed on the day before the meeting, from a lady, 55 years of age. In parts it was an ordinary compound cyst; but in other parts, it was composed of small areolar spaces filled with a dense gelatinous substance like size or glue. This was the characteristic appearance of the so-called pseudo-colloid tumour of the ovary, and Mr. Wells had brought the specimen to the Society hoping that some member would point out both the naked-eye and microscopic appearances by which it might be distinguished from true colloid.

Dr. C. J. B. Williams, Dr. Bristowe, Dr. Gibb, Mr. Nunn, and Mr. William Adams, entered at some length into this discussion, and ultimately the specimen was referred to Dr. Bristowe, Mr. William Adams, and Mr. Spencer Wells for report.

Mr. NUNN asked if Mr. Spencer Wells believed the matter to be true colloid from it viscidity, or from the nature of the containing cysts?

Mr. SPENCER WELLS said that in the cysts the matter varied; in some it was almost solid, and sprung back when drawn out; in others it was almost fluid.

Dr. BRISTOWE considered that it greatly resembled true colloid, but he believed it was not so. He believed that the microscope was of very little use in determining the question, and that the eye was the best test.

Dr. GIBB alluded to the chemical character of colloid as diagnostic of its being true or false. He believed that if

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much gelatine or chondrine was found in the matter, it was probably simple.

Mr. WILLIAM ADAMS had in a former session exhibited many specimens of colloid disease. He remarked that the difficulty was in the diagnosis of the reproductive and non-re-productive form of colloid. In several cases there was no return of disease after removal. He mentioned one in which colloid disease of the breast returned three times. The patient at length died with extensive colloid disease of the breast.

Dr. C. J. B. WILLIAMS suggested that a report should be made on the specimen. They could, at least, determine the question whether there were cells in it or not. If there were no cells, it probably was not malignant.

Dr. Bristowe, Mr. William Adams, and Mr. Spencer Wells, were requested to report further on the specimen.

Mr. WILLIAM ADAMS then brought forward specimens, illustrating

SCROFULOUS DISEASE OF JOINTS.

It was, he said, very commonly believed that scrofulous disease of joints never resulted in anchylosis. One of the specimens he exhibited would, he believed, show that this result occasionally occurred. The patient, from whom it was taken, was a man, aged 22, who had suffered from disease of the knee-joint for seventeen years. At the time of the operation there was one fistulous opening. The limb was much contracted, and he had been under treatment for ten months, by an apparatus with a view to straighten the limb. As not the least improvement followed, he applied to Mr. Adams in order that the limb might be removed. Mr. Adams, however, excised the joint. The patient was (three weeks after the operation) doing well. The bones were found to be firmly anchylosed. Whilst this case showed that anchylosis did occur in scrofulous disease, it also seemed to show that a great length of time was required for such a result. The other specimen was taken from a girl, aged 10, who had had deformity of the hip for four and a-half years, but no sinus. It yielded to gradual extension. She afterwards died of scrofulous meningitis. Fibrous anchylosis of the hip-joint was found.

Dr. GIBB exhibited a specimen of

EXOSTOSIS GROWING FROM THE INNER SURFACE OF THE SKULL,

which he had removed from an elderly female, who died of delirium tremens. She had been subject to epileptic fits the greater part of her life, and latterly had become intemperate, which brought on delirium tremens on three or four occasions. At the autopsy the membranes of the brain were found to be highly congested, amounting to inflammation in some places. On the inner surface of one of the parietal bones was a projecting smooth knob the size of a bean, which he believed was the cause of the epilepsy. The co-existence of epilepsy and delirium tremens, he thought a circumstance of much interest, and believed their co-existence was not a frequent occurrence.

In reply to Mr. CANTON, Dr. GIBB said that he had once found a small body, the size of a millet-seed, growing from the interior of the skull, in which there was no history of epilepsy.

Dr. BRISTOWE considered that there was no doubt that epilepsy was sometimes thus caused; but there was, he believed, equally no doubt that such conditions might exist without giving rise to epilepsy.

Mr. CANTON had found distinct projections in which there was no epilepsy. He believed that they were more likely to produce epilepsy when they were situated so as to press on the anterior part of the brain.

Dr. CRISP remarked that as Dr. Gibb had mentioned that his patient (a woman) had suffered from delirium tremens, he would ask the Society how it happened that that disease was more common in men than women.

The PRESIDENT believed it was more common in women than was supposed.

Dr. RISDON BENNETT then brought forward a specimen of

PLUGGING OF THE MIDDLE CEREBRAL ARTERY.

The patient, a woman, aged 19, was admitted under his care into Victoria-park Hospital for disease of the heart. She had had palpitation and other symptoms of cardiac disease for twelve months, but for ten weeks she had been worse. She had never had any form of rheumatism. She had had hemiplegia. There was some suspicion of phthisis. The heart's impulse was increased, and there was increased dulness. There was also a loud systolic bruit at the apex. She was very anæmic. She was improving when she complained of giddiness and some pain of back and head. This was supposed to bear some relation to the catamenia, which had then been absent six weeks, and measures for the re-establishment of the menstrual function were had recourse to. One morning, a few days later, on rising, she found that she had complete loss of power on the left side, the face being drawn to the right, and had sudden burning pain over the right parietal bones. The pupils were dilated. The sensation was impaired to some extent, but power of motion was quite lost. There had been no unconsciousness, in fact, as stated, she found herself paralysed on trying to get up. The degree of paralysis varied, and at one time seemed to be passing off. She, however, afterwards became capricious, petulant, and ultimately delirious, and died. At the autopsy there was found general congestion of the membranes, but no other marked disease, except that found in the specimen, viz. that the middle cerebral artery on the right side was firmly plugged by a clot. The vessels beyond were contracted. There was rather more fluid than natural in the ventricles. The mitral and aortic valves were diseased, being occupied by thick, firm, fibrinous deposits.

Mr. HULKE asked if the plug in the artery consisted merely of blood-clot, or was formed by one of the vegetations from the aorta.

Dr. RISDON BENNETT stated that on examination it was found that the specimen having been some time in spirit, the clot was firmly adherent to the coats of the vessel, so that its previous character could not be ascertained, but the contracted and bloodless state of the vessels beyond the clot showed that the obstruction had been very complete.

Dr. BRISTOWE believed that in the majority of such cases there was no disease of the heart. The obstruction was often spontaneous, or was from some local disease of the artery.

Mr. CANTON remarked that of all arteries in the body the middle cerebral was the oftenest diseased. He had found the artery quite closed by deposit in its walls. In this case there were no cerebral symptoms during life.

Dr. WILKS' experience confirmed the conclusions arrived at by Dr. Bristowe, that the plugging of the cerebral vessel was not generally associated with disease of the heart. The condition of the blood was the cause, he believed, that led to the obstruction, rather than any disease of the heart, or local disease of the artery.

Dr. GIBB alluded to a case of a boy, aged 11, who was admitted into St. Bartholomew's Hospital, under Dr. Farre's care. He had suddenly become hemiplegic. He had before been an in-patient for cardiac disease following rheumatism. It was believed that the paralysis was due to occlusion of one of the arteries of the base of the brain. He recovered.

Dr. WILKS then exhibited

A HEART,

in order to show that the pulmonary artery and aorta participate in the changes of size which occur in these cavities. On a former occasion he had shown how, in a case of mitral contraction where the left ventricle was small, and the right ventricle much enlarged, the aorta was diminished in size, and the pulmonary artery considerably dilated, the practical bearing of which was the relation this condition bore to the increased second sound. As the statements were received with some hesitation, the present example of an ordinary enlarged heart of bronchitis was brought forward to show the same facts, the increased calibre of the pulmonary artery proportioned to the enlargement of the right ventricle. In this case, however, the increase of size was not limited to the trunk of the vessel, but extended throughout the lungs; and this, Dr. Wilks believed, was always the case when the bronchial tubes were dilated. In the present example, that of a boy, who had suffered since an infant from bronchitis resulting from hooping-cough, the tubes were very much enlarged towards the circumference of the lung, and the accompanying pulmonary arteries were in like manner distended. The same facts hold good in the cases of enlarged tubes existing in cirrhosis of the lung, and in both instances the increase of size of the vessel is due to the same cause as promotes that of the tube. In the latter case, he had always

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acquiesced in Dr. Corrigan's theory as to the contraction of the pulmonary tissue as the cause, while in the case of children where the disease commences in the tubes, the condensation of the intervening lung substance can only assist in the process. In some cases the cause was very obscure, as was illustrated in another specimen of

DILATATION OF THE BRONCHIAL TUBES.

The specimen was taken from a woman of middle age, who was brought to the Hospital in the last stage of her illness. She only lived a few days, and was not seen more than once by Dr. Wilks. She was suffering chiefly from dropsy. There was no cardiac disease. In the left lung there were the usual evidences of cavities. Phthisis was diagnosed. She was said to have been ill for nine weeks only, but she had had some cough for years. The apex of the left lung was found full of cavities produced by dilatation of the bronchial tubes. The lungs were very emphysematous. These changes Dr. Wilks believes might have existed many months or years. There was no tubercle and no signs of breaking up of the lung tissue.

WESTERN MEDICAL AND SURGICAL SOCIETY.

FRIDAY, APRIL 19, 1861.

THOMAS KEEN, Esq., Vice-President, in the Chair.

Dr. SANSOM read a paper

ON DEATH FROM CHLOROFORM.

The author considered that, at the highest estimate, the number of deaths from chloroform to the number of inhalations bore the proportion of one to ten thousand. Various considerations, however, concurred to show that this should be very much more favourable. In the first place, it was very probable that several of the deaths were from shock or fright, and not from chloroform; and in furtherance of this view was the fact that half of the number of deaths occurred before the commencement of the operation for which chloroform was administered. Another avoidable circumstance increasing the death rate was supposed to be carelessness and laxity in the administration of the vapour. Circumstantial records of thirty-four cases of death which have occurred since the publication of Dr. Snow's work were presented: the author combined them with those recorded in that volume and offered an analysis of their most salient points. In cases of death the proportion of males and females is about two to one, and this seemed to the author strange since the anæsthetic is so largely used in midwifery. The average age for death is thirty to forty. It certainly seems that the strong and healthy stand a worse chance than the debilitated; but of all states of the system, chronic or acute, alcoholism the most predisposes to death. Extensive disease of the lung occasionally disposes to death from asphyxia; disease of the heart probably does not influence the mortality. Dr. Sansom strongly deprecated the administration of chloroform sprinkled on handkerchiefs, etc., basing this not only on the observed fact that a highly-charged atmosphere (5 per cent. Snow, 8 per cent. Lallemand, Perrin, and Duroy) was fatal to animals, but on the circumstance that of all the cases which he had collected only two were mentioned as occurring wherein a proper inhaler had been used. Of fifty-one cases thirty-eight declared their danger by sudden stoppage of the pulse. Five deaths occurred in which there was manifested great muscular excitement, collapse immediately following; these were all strong men in their prime. Sudden vomiting and then death occurred twice: congestion of the face was the most marked sign in six, and cessation of breathing in eight cases. Dr. Sansom considered that death occurs both by asphyxia and by syncope—in animals by palsy of respiration, the heart being "ultimum moriens;" in man occasionally from this cause, but more frequently from palsy of the heart, the respiration outliving it. In animals a constant sign on post-mortem examination is distension of the right chambers of the heart; in man this is a frequent, but still far from a constant sign. Fluidity of the blood and a dark colour thereof occur almost invariably. The following were the author's conclusions:—In animals death occurs by asphyxia, and begins in the brain. In man death occurs by asphyxia or syncope, and begins in the brain, in the heart, or in the lungs. Artificial respiration is the only reliable means for restoration in critical cases. Galvanism of the phrenic is valuable where the means are at hand. Before anything is done the tongue should be well drawn forward, and the mouth and throat cleared from mucus.

NEW INSTRUMENT.

SAVORY AND MOORE'S EAR DOUCHE.

THE annexed engraving represents a New Ear Douche, brought out by Messrs. Savory and Moore. The principle and construction of this douche are similar to that of the Eye Douche they introduced in March, 1860, which was represented and described in these columns. The great advantage of these douches is that the patient avoids the splashing and discomfort of having the fluid running down his back,—a great objection to the ordinary syringes, — and the patient never uses the same fluid twice. They are very neat and most useful little instruments, well worthy the attention of our readers.

OBITUARY.

WILLIAM H. PORTER, M.D., F.R.C.S.I.

WE regret to announce the death of Dr. Porter, which took place suddenly, at his residence, Kildare-street, Dublin, on the morning of Sunday, the 28th ult. On the preceding day he was engaged in Professional visiting, and had in addition, spent a considerable time in writing. In the evening he complained of pain in his chest, but attributing it to the position in which he had so long sat at his desk, refused to allow Dr. Corrigan to be sent for. Having obtained some relief from the application of a sinapism, he composed himself to sleep, and was next morning found dead in his bed. His death had apparently occurred two or three hours previously.

Dr. Porter's University career was a distinguished one, and his classical attainments were of a high order, as was evidenced by his having attained a Scholarship in Trinity College in 1808, when only 18 years of age. He took the degree of B.A. in the University of Dublin in 1810, and proceeded to the higher degrees of M.A. in 1814 and of M.D. in 1842. In 1814 he became a Licentiate, and in 1817 a Fellow of the Royal College of Surgeons in Ireland. In October, 1836, on the resignation of Dr. Colles, he was elected Professor of the Theory and Practice of Surgery to the College. In 1838 he filled the office of President. He was for forty-one years one of the Surgeons to the Meath Hospital and County Dublin Infirmary, and since the death of Sir Philip Crampton (in June, 1858) he was the senior of the six Surgeons attached to that Institution. Last year, on the death of Dr. Williams, he was chosen to represent the Irish College of Surgeons in the General Council of Medical Education and Registration of the United Kingdom.

Dr. Porter's contributions to Surgical literature have been numerous and highly practical. Among the principal are his "Observations on the Surgical Pathology of the Larynx and Trachea," and his "Observations on the Pathology and Treatment of Aneurism." In 1836 he contributed to the *Dublin Journal of Medical Science* a paper on Fracture of the Neck of the Femur, an accident which he experienced in his own person not very long before his death. Among his later writings is a series of valuable "Essays on the Natural History of Syphilis," to be found in the *Dublin Quarterly Journal of Medical Science*.

By his decease the Surgeoncy to the Meath Hospital, the Professorship of Surgery in the Royal College of Surgeons

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in Ireland, and the representation of the College in the General Medical Council become vacant. Thus, although the Medical Act has not yet been three years in operation, the Irish College has twice lost its representative by death. Dr. Porter was 71 years of age.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS (a).—The following gentlemen passed their Primary Examinations in Anatomy and Physiology at Meetings of the Court of Examiners, on the 25th and 26th ult., and when eligible will be admitted to the Pass Examinations:—

Ballard, W. W.
Bright, James Albert
Brittain, T. L.
Brodie, G. B.
Butlin, Charles Henry
Conolly, Michael A.
Cooke, G. R.
Corlett, Joseph Benson
Deck, John Field
Delamotte, George Coates
Ellerton, John
Ellison, S. K.
Foote, Harry
Galbraith, C. J.
Gray, F. J
Haycock, George
Hayward, Frank Edward
Hedley, William Snowdon
Hopton, A. C.
Hughes, Thomas Henry
Husband, Edward
Lee, Matthew
Lisle, Edward Philip
Mann, A. G. C.
Murgatroyd, Thomas
Phillips, Alfred
Proctor, Peter
Rudge, J. Edmund
Rutherford, William
Taylor, Charles
Teale, J. W., B.A. Oxon.
Thomas, George Jenkin
Turner, John
Thorold, E. F.
Wadsworth, Alfred
Waghorn, Frederick
Welby, W. M. H.
Whitall, James William
Wilson, John
Wright, Charles James.

(a) This College is the only one which does not send lists of New Members to the Medical Journals.—Hence frequent mistakes, for which the Journals are not responsible.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise on Thursday, April 25:—

A'Beckett, William, G., Melbourne, Australia
France, William Henry, Sheffield, Yorkshire
Greenwell, Baker
Hutchinson, John Hanley, Catterick, Yorkshire
Hill, John Daniel, Cranae, near Market Harboro'
Knapp, John Henry, Clifton
Kent, Octavius Jackson, Hampton, Middlesex
Rawson, Edwin, near Leeds, Yorkshire
Spencer, William Henry, Preston, Lancashire
Thomas, David Bowen, Newcastle Emlyn, South Wales
Tucker, Anthony Cornish, Sheepwash, near Hatherley, North Devon
Watson, William, Sedbergh, Yorkshire
Wright, Alfred, Mount Sorrel, Leicestershire
Willett, John, Great Bedworth, Cheshire.

The under-mentioned gentlemen also on the same day passed their First Examination:—

Goldsmith, George Pocock, Walton-place, Brompton
Hepple, Thomas, North Shields.

APPOINTMENTS.

STRANGE.—Dr. Wm. Strange has been appointed Physician to the Worcester Infirmary, in the room of Dr. Davis, resigned.

HEWITT.—Mr Thomas Hewitt, M.R.C.S. Eng., L.S.A., has been appointed Medical Officer to the Tipperary General Dispensary.

DEATHS.

CAMPBELL.—April 27, at No. 51, West-street, Glasgow, Thomas Campbell, late of Leven, Fifeshire.

CLARK.—Recently, John Clark, M.D., Deputy Inspector-General of Army Hospitals, aged 54.

COUCH.—April 24, William Oakley Couch, of Gibson-square, Islington, M.R.C.S. Eng., L.M., L.S.A., aged 37.

KILVERT.—April 28, John Kilvert, of Darlington-street, Bath, M.R.C.S. Eng., L.S.A., aged 63.

MACKSEY.—Recently, William P. P. Macksey, Staff Assistant-Surgeon, Army.

POWER.—April 24, from injuries on being thrown from a carriage, Andrew Graves Power, of Tottenham-place, Clifton, Bristol, M.D. Univ. St. And., M.R.C.S. Eng., L.A.H. Dub., and L.M.

PROBART.—April 25, suddenly, Francis George Probart, of Bury St. Edmunds, Suffolk, M.D. Univ. Edin., F.L.S., Justice of the Peace for the County, and for many years Senior Physician to the West Suffolk General Hospital.

SAUBOLLE.—March 15, at Chandernagore, Mons. J. J. Saubolle, M.D., aged 84.

SETON.—April 25, at Kennoway, Fifeshire, Christopher Seton, late of Pittenween.

SPEEDY.—March 31, at Hambentot, Ceylon, suddenly, of fever contracted in the performance of his duty, Staff Assistant-Surgeon James Speedy, L.R.C.S. Irel., aged 24.

SYMMINGTON.—April 22, at Penicuick, Edinburgh, William Symmington, M.D. Edin., L.R.C.S. Edin., L.S.A. Lond.

TAYLOR.—April 25, William Henry Taylor, of Princes-street, Norwich, L.S.A., aged 49.

WILLIAMS.—April 23, John William Williams, of Duffield, Derbyshire, M.R.C.S. Eng., L.S.A., aged 37.

IMPROVEMENT OF MEMORY.—Dr. Edward Pick will deliver a Lecture on his new and natural System of Improving the Memory, at Guy's Hospital, next Monday, the 6th inst., at 11 o'clock a. m.

SURGICAL SOCIETY OF IRELAND.—The Annual Session of this Society terminated on Saturday evening, the 27th ult., with, as usual, a brilliant and agreeable *conversazione* at the Royal College of Surgeons. In addition to the Fellows and Licentiates of the College, there was a large assemblage of distinguished non-Professional guests, who were received by the President, Dr. Robert Adams. The arrangements of the evening were even more than ordinarily effective.

DEGREE OF MASTER IN SURGERY IN THE UNIVERSITY OF CAMBRIDGE.—A statute, framed by the Commissioners on the 23rd October, 1860, concerning the mode of proceeding to the degree of Master in Surgery in the University of Cambridge, was approved by Her Majesty in Council on the 16th of April. The Master in Surgery will acquire the same status and privileges in the University as a Master of Arts. The candidate for the degree must reside nine terms, and conform to the regulations for the study of Arts and Surgery which may be made from time to time by the University. The regulations will probably be issued shortly.

PATHOLOGICAL SOCIETY OF DUBLIN.—The last meeting of this Society for the Session 1860-61 was held on Saturday, April 20, Dr. Fleming, President, in the chair, who having alluded to the subject decided upon by the Council as that for the Gold Medal—viz., "Diseases of the Cord, the Testicle and its Coverings," said, it was gratifying to find that this year there were no less than eight essays, being double the number of any since the formation of the Society. All those essays were highly creditable to the Dublin School of Medicine, and five out of eight possessed preeminent merit. The sealed envelopes enclosing cards with the real names of the successful essayists were then formally opened, and the President proclaimed the winner of the Gold Medal to be Mr. William Stokes, whose essay, illustrated with coloured drawings and tabular charts of morbid phenomena, was exhibited and inspected with marked admiration by all present. The writer of the next successful essay was declared to be Mr. William Foot. The President, receiving the Gold Medal from the Secretary of the Society, presented it to Mr. Stokes, expressing at the same time his sincere pleasure in being the medium of conferring that badge of honourable distinction upon one who had so incontestably proved his claim to it among so many and such able competitors. The President then presented the Silver Medal to Mr. Foot, congratulating that young gentleman upon his success, and expressing the hope that it would prove the prelude to future success and triumph.

ORIGIN OF THE MENAGERIE AT THE JARDIN DES PLANTES—Geoffroy St. Hilaire, at first a most laborious student at the Jardin des Plantes under the celebrated Fourcroy and Daubenton, exerted himself most heroically during the frightful massacres of September in rescuing the priests who had been his preceptors. Overcome with emotion, he then retired for a while into the country, but at the urgent solicitation of Hauy and Daubenton, he returned to Paris, and became one of the officials at the Jardin des Plantes. It was during the Reign of Terror, when the timid were only too glad to be replaced by more resolute friends; and first Daubenton, and then Lacepède, gave up the post of Demonstrator of the Cabinet of Natural History in favour of the courageous young Geoffroy. It was, indeed, to his bold and ingenious intervention and courageous fictions, which might have cost him his

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life, that these two great men owed their lives. Indeed, the proscribed of all parties found him their friend, converting as he did his apartments at the Jardin into a kind of asylum. By a strange contrast, amidst all this confusion and bloodshed, a man of patriarchal simplicity and goodness of heart, Bernardin de St. Pierre, author of "Paul and Virginia," was placed at the head of the Jardin, now called the Museum of Natural History, with its twelve professors. A Chair of Zoology was created, but, being a new post, none of the other professors would take it, and it fell to Geoffroy's lot as being the youngest, he being then only 22. He had never hitherto taught anything but Mineralogy; but he undertook his new task of teaching the history of the Mammalia and Birds with none the less resolution. The young Professor, however, had but the fragments of a collection as objects of instruction, and as to a menagerie, France at that period knew of none other than that of the Gardens of Versailles. The simplest thing would have been to have transferred this to the Jardin, but during the period which followed August 10, the menagerie experienced the lot of everything attached to Royalty, and underwent a true massacre. Most of the birds and quadrupeds were eaten, a rhinoceros and some lions, of which this use could not be made, having however been spared. These, too, were about to be sacrificed, when they found an eloquent and pathetic defender in the new Intendant of the Jardin. The harmonious poet of nature, Bernardin de St. Pierre, constituted himself, in fact, their advocate, and pleaded their cause at the bar of the National Convention, taking as the epigraph to his discourse *Miseris succurrere disco*. More fortunate than others with the sentimental murderers who constituted the tribunal, he gained his cause. The lives of his clients were saved, and they were transferred to the Jardin des Plantes. Geoffroy added to them some ambulant menageries which the Commune of Paris had caused to be seized in the "cause of morality," and thus was laid the foundation of this valuable collection.—*Dubois' Eloge of Geoffroy St. Hilaire.*

ARMY ASSISTANT-SURGEONS.—In the House of Commons on Friday evening, Lord Burghley asked the Under-Secretary of State for War why a large number of Staff Assistant-Surgeons had been placed upon half-pay, and how long it was probable that the state of half-pay would be continued. General Lindsay said he was extremely anxious to have the matter cleared up. The sanitary interests of the private soldiers made this a matter of no ordinary importance, and it involved in a great degree the comfort of Medical officers themselves. He thought it a great hardship that a Medical officer could not have leave of absence, in consequence of the great responsibility which devolved upon them, without employing another Practitioner to perform his duties. Mr. T. G. Baring would state to the House precisely what he had intended to say the other evening. He meant to say two things; the one was that the Second Assistant-Surgeons of the battalions of Guards would not be taken away from them, and the other was that the Second Assistant-Surgeons of Line regiments at home would be placed on half-pay. He did not intend to say they would not be taken away from the regiment. That arrangement was being entirely carried out. It was considered by the Secretary of State and by the Commander-in-Chief that the Second Assistant-Surgeons in regiments at home were no longer necessary. As the gallant officer had mentioned the Report of the Sanitary Commission, and the opinions of those supposed to be most conversant with the wants of the soldier in regard to Medical officers, he must say no one, in whatever position, had paid more attention to that subject than Lord Herbert—(hear, hear)—and no one was better qualified to decide how those wants could best be attended to. His opinion was that Second Assistant-Surgeons should no longer be attached to regiments at home. The House itself was able to judge whether three Medical officers were required to attend 800 men between the ages of 18 and 30, and whose complaints were mostly of a character which, though rendering them for a time incompetent for service, were not of a nature requiring very serious treatment. Lord Herbert held the opinion, in which his Royal Highness the Commander-in-Chief concurred, that Second Surgeons for regiments at home were no longer required. In the Estimates for this year, therefore, only one Assistant-Surgeon was taken for regiments at home. It was to be regretted that it should be necessary to place any of these Medical officers upon half-pay, but the Chinese war having ceased, the services of a certain number of them could be dispensed with. In effecting reductions, the rule was to deal with the junior officers, and twenty-nine Assistant-Surgeons had been placed on half-pay. He hoped it would not be requisite to keep them on half-pay for any great length of time, it being intended to give them active employment as vacancies occurred. The change had been made entirely with a view to the efficiency of the Medical Service. The Secretary of State for War did not mean to imply that these Assistant-Surgeons were idling away their time, but that with three Medical officers for one regiment there was not a proper opportunity for them all to improve themselves in their Profession.

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VITAL STATISTICS OF LONDON.

Week ending Saturday, April 27, 1861.

BIRTHS.

Births of Boys, 930; Girls, 928; Total, 1858.
Average of 10 corresponding weeks, 1851-60, 1679·7.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	610	572	1182
Average of the ten years 1851-60	574·7	547·2	1121·9
Average corrected to increased population..	..	..	1234
Deaths of people above 90	..	..	1
Deaths in 15 General Hospitals	41	25	66

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1851.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	376,627	..	10	2	2	11	2	2
North ..	490,396	..	5	5	4	22	2	2
Central ..	393,256	..	..	5	..	12	4	1
East	485,522	1	1	6	2	13	10	5
South ..	616,635	2	1	6	4	21	14	5
Total.. ..	2,362,236	3	17	24	13	79	32	15

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METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29 840 in.
Mean temperature	44·3
Highest point of thermometer	61·3
Lowest point of thermometer	26·8
Mean dew-point temperature	38·4
General direction of wind	N.E.
Whole amount of rain in the week	0·52 in.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Mr. Mitnish.—Many thanks.

Mr. Heslop's Case shall appear.

Mr. Nottingham's Cases of Excision of the Knee-joint shall appear as soon as possible.

X. Y. Z.—Mr. Churchill's Manuals would supply the want of our Correspondent.

We must ask for the indulgence of many of our Contributors, whose Papers are delayed by pressure of numerous interesting communications.

Catholicus.—We regret that the feelings of our Correspondent have been hurt by any expressions in the Letter of our Vienna Correspondent. We feel certain that there was no intention on his part to offend any religious body; and we trust that, as Medical men of all varieties of religious opinions are striving after the same object, the relief of suffering, the community of object will unite more than a diversity of opinion can separate.

Dates of Death.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Will some of your correspondents inform me when the following Medical gentlemen died:—Dr. James Johnson, author of the work on "Dropsical Climates," Mr. Chevalier, Mr. Wadd, Mr. James O'Beirne, and Dr. J. Henry Davidson?

I am, &c. H. L. Maysmor, M.D.

Springfield Lodge, Park-village East, Regent's-park.

The Convict Hodges.

Dr. Wybrants has forwarded the following letter to us:—

"North Liberty, Wells, April 25.

"My Dear Sir,—I have read Mr. Hudson's letter to the Editor of the *Medical Times and Gazette*, dated April 5, with surprise. In answer to the question put to me by the Court, I stated that at the time I examined the prisoner Hodges in the Wells Gaol, *he had not gonorrhœa*.

"Yours very truly, J. Nicholls.

"Dr. Wybrants, Shepton Mallet."

Sanitary Reports.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—If your Correspondent, "J. N.," will send me his name and address, I will forward him my Reports on the Sanitary Condition of Gloucester for 1858—59.

I am, &c.

Gloucester, April 26. Buchanan Washbourn, M.D.

Camphorated Chalk.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I have heard it rumoured that camphorated chalk tooth-powder renders the teeth brittle. Is there any truth in this rumour?

April 27. I am, &c. Tooth-Powder.

Warning to Medical Students about to Enter the Army or Navy.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—It may be interesting to those of your readers who propose to enter either the Army or Navy to hear that in the former service the Medical warrant has been very materially modified, and that those young men of talent and education, who have recently entered that service on the faith of Her Majesty's Order in Council, find that faith has been broken with them, and that on promotion they will be degraded in rank and position. But, while the Army warrant has been so far modified as only to affect those Assistant-Surgeons to be promoted in future, a far more sweeping change is about to be effected in the Navy; and it is pretty certain that all classes of Medical Officers are to be reduced in rank, uniform, pay, pensions to widows, etc, and that this step of degradation is to be "retrospective."

I trust, Sir, that you will point out to your student readers these gross breaches of faith, how little confidence can be placed even in the Queen's Orders in Council, and how cautious they should be in entering services where nothing but cunning and duplicity prevail.

When there was a scarcity of Medical Officers certain privileges were granted. Now that, owing to the cessation of war, the market is somewhat glutted, the authorities, with a very short-sighted cunning, withdraw them, or rather attempt to do so.

As I feel certain the Profession and the country will not allow of such gross breaches of faith, I regret to be obliged to sign myself as

May 1. "One of the Duped."

Dr. Macloughlin.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I have to thank you for the clear manner in which you have stated my case in the last Number of the *Medical Times and Gazette*. But there is one point to which I beg leave to call your attention, which, if not noticed by me, might leave on the minds of the numerous readers of your influential Journal an impression unfavourable to me.

You have correctly stated that Sir James Macgrigor denied to the Horse Guards that he had used the words, that I was refused promotion "because I had no private interest;" but, by the papers placed last year on the table of the House of Commons by the War Office, it may be seen that he admitted to have promoted some gentlemen over my head "in consequence of their private interest!" Therefore I submit, that since he made the above admission, it cannot be a stretch of imagination to suppose it possible that after having defied me to name one whom he had promoted over my head in consequence of private interest,—and after I had named four, whom he was obliged to acknowledge he had promoted over my head in consequence of their private interest,—it cannot, I repeat, be a stretch of imagination to suppose it possible, that as I was going on to name eight more, that he might have used the words I say he did use to silence me. And had the then Horse Guards done their duty, as they were bound to do according to the 12th paragraph of the Articles of War, it is possible, that as Sir James Macgrigor had made the above admission, and as Mr. Tanner, his secretary, was present at the interview of the 7th of December, 1818, it is possible, I repeat, that before a Court of Inquiry, or before a Court-Martial, that Sir James's denial of having used the above words might have been questioned.

As a homage to truth, I may here add, that two of the above gentlemen named in the papers placed before the House, were civilians, who had never done a day's duty till they were promoted over my head: that one came to Brussels a fortnight after the battle of Waterloo as an amateur; he visited the Hospitals as an amateur, returned to London in a few days, and without having attended one single patient was promoted over my head, and over the head of all the Surgeons and Assistant-Surgeons who had served during the Peninsular War, the American War, and at the battle of Waterloo, "in consequence of the great services he had rendered the sick and wounded at Brussels."

On public grounds, therefore, I trust you will do me the favour to insert this note in your columns.

I am, &c.

D. Macloughlin, M.D.,

34, Bruton-street, London, W. Member of the Legion of Honour

April 23.

COMMUNICATIONS have been received from:—

Professor Simpson; Dr. Fleming, Dublin; Dr. Dalton, New York; Professor Laycock; Mr. LeGros Clark; Dr. Risdon Bennett; Dr. Peacock; Mr. Soelberg Wells; Dr. P. H. Watson; Dr. Corfe; Dr. McWilliam; Dr. Humphry, Cambridge; Dr. Coghlan, Dr. Duigan; Dr. E. Pick; Messrs. Savory and Moore; Mr. Pollard; Dr. Maysmor; Registrar-General; Mr. Vincent; Mr. Mitnish; Mr. Wilson; Mr. Hewitt; Dr. Strange; and Dr. Wybrants.

APPOINTMENTS FOR THE WEEK.

May 4. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

Royal Institution, 3 p.m. Max Müller, Esq., "On the Science of Language."

6. Monday.

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

Royal Institution, 2 p.m. General Monthly Meeting.

Epidemiological Society, 8 p.m. Dr. Smart "On the Diseases of Hong Kong and the Canton River Station."

7. Tuesday.

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

Royal Institution, 3 p.m. Mr. John Hullah "On the History of Modern Music."

Pathological Society, 8 p.m. Meeting.

8. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

Hunterian Society, 8 p.m. Council Meeting.

9. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.

Royal Institution, 3 p.m. Mr. Pengelly "On the Devonian Age of the World."

10. Friday.

Operations, Westminster Ophthalmic, 1½ p.m.

Results."

Royal Institution, 3 p.m. W. S. Savory, Esq., F.R.S., "On the Relation of the Animal and Vegetable to the Inorganic Kingdom."

EXPECTED OPERATIONS.

King's College Hospital.—The following Operations will be performed this day (Saturday) at 2 o'clock:—

By Mr. Fergusson—Cleft Palate, two cases; Lithotomy; Lithotrity; Removal of Upper Jaw.

By Mr. Wood—For Radical Cure of Hernia.

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ORIGINAL LECTURES.

LECTURES
ON
THE SPINAL CORD,
DELIVERED AT
The College of France,
DURING THE SUMMER SESSION 1860,
By M. CLAUDE BERNARD,

Member of the French Institute; Professor of General Physiology at the Faculty of Sciences, &c.

Lecture XIII.

ON THE ORIGIN OF THE SYMPATHETIC NERVE.

Summary: The Spinal Cord is the Source from which all the Peripheral Ramifications are derived—Opinions of Anatomists on the Nature, Origin, and Functions of the Sympathetic Nerve—Remak's Fibres—The Sympathetic Nerve arises from the Spinal Cord—Experiments of Pourfour-Dupetit, Duprey, and Magendie—The precise Origin of the Cervico-Cephalic Portion of this Nerve ascertained by Budge and Waller—Bernard's Experiments on this Subject—Discovery of the Augmentation of Temperature which follows the Division of the Sympathetic Nerve—Jacubowich's Opinions on the Nervous Cells of the Spinal Cord.

Gentlemen,—The central axis from which the nerves of sensation and motion, or animal life, are derived, gives birth to other nerves, which regulate a totally different order of functions, and direct the operations which take place in the very depth of our tissues. You have witnessed the experiments which prove the existence of the connexion between the spinal cord and the nerves of animal life; it now remains for us to convince you that the chemical phenomena which arise within the system are also placed under the influence of the same centre.

The sympathetic nerve, a few years ago, was generally viewed as a distinct and independent nervous system. Anatomists were struck not only with its distribution, which differs from that of the cerebro-spinal nerves, but also with its appearance: its colour is not the same; its disposition is peculiar; and Remak has described certain histological characteristics which he considers as belonging exclusively to this portion of the nervous system, while other micrographers suppose them to be the vestiges of an imperfect state of development. All these views, however, are now completely laid aside; and the spinal cord is positively acknowledged to be the origin from which all the peripheral ramifications of the nervous system arise, whether they extend to the muscular apparatus, to the skin, mucous membranes, and organs of sense, or to the viscera of organic life.

The experiment which has brought this fact to our knowledge is not a recent one, although its results were formerly interpreted in a different sense. In the course of the last century, Pourfour-Dupetit discovered that the division of the sympathetic nerve in the cervical region was attended with contraction of the pupil, and vascularisation of the conjunctiva, on the corresponding side. He thence inferred that the *animal spirits* were conveyed to the eye by the sympathetic nerve, and that, after dividing it, they were prevented from ascending to the head, as before. From this experiment he drew an important conclusion: viz. that the animal spirits, instead of descending from the brain to the lower parts of the body, followed the opposite direction, and rose from the chest into the head. In the scientific language of that period, this was equivalent to saying that the sympathetic nerve (or its cervical portion at least) did not arise from the brain, but was derived from another and a lower region of the body: for in those days, the nervous system of organic life was believed by anatomists to spring from the third pair of nerves, which are in fact anastomosed with some of the ramifications of the carotidian plexus, an off-shoot of the cervical branch of the sympathetic nerve.

This experiment was successfully repeated by Duprey, Magendie, and numerous other observers; but the real origin of this important division of the nervous system remained undiscovered till lately, when the interesting researches of Budge and Waller proved its cervico-cephalic branch to be derived from the spinal cord, on a point which they designated under the name of the ciliary spinal region, their attention having been exclusively directed to the ocular phenomena which lie under its control: it corresponds to the junction of the cervical and dorsal divisions of the spinal axis. These gentlemen were led in the following manner to ascertain this important fact. In examining the alterations which arise in compound nerves, when divided, Waller had observed that the peripheral extremity alone degenerates, the central portion retaining its usual structure and properties; but on dividing both the sympathetic and pneumogastric nerves at once, in a dog (for in this animal they are too closely connected to be easily separated) he found that part of the common trunk was atrophied, in the upper extremity, and the remaining portion in the lower. On comparing this modification with the results of his former experiments, he thought it probable that although parallel, the two nerves followed opposite directions, the one ascending to the head, the other descending to the lower parts of the body. On following up this discovery, he was enabled by the same method to trace back the cervical branch of the sympathetic nerve to the thoracic ganglia, and the apparent branches of these to the spinal cord.

When this ascending branch of the sympathetic nerve is divided, the application of galvanism to the lower, or central extremity has no effect upon the cephalic region: but on galvanizing its peripheral portion, the pupil, which was strongly contracted in consequence of the operation, dilates again with considerable rapidity. The radiated fibres of the iris, therefore, evidently correspond to the ascending ramifications of this nerve; it therefore arises from the spinal cord, being, as you perceive, directed upwards. But a still more indisputable proof of this appears, in the effects produced by the unilateral division of the central axis, between the seventh cervical and first dorsal vertebræ; the radiated fibres of the iris are paralyzed in the corresponding eye: and if it is desired to ascertain whether nervous influence is supplied in this case by the anterior or posterior roots, there is no difficulty in proving it to be derived from the former: for when the posterior roots of the eighth pair of spinal nerves are divided, the pupil remains in its usual state; when on the contrary, the experiment is performed on the anterior root, the effects just described immediately take place; the intensity of these phenomena is, however, much greater when the anterior root of the preceding pair are also divided; it is therefore evident that the ramifications of this nerve, which spread to the pupil, are derived from the motor roots of the seventh and eighth spinal pairs. Lastly, if the galvanic stimulus is applied to the central extremities of the divided roots, no change occurs in the pupil, which is dilated at once when their peripheral extremities are galvanised. This series of experiments establishes on a firm basis the important fact, that the sympathetic nerve arises from the spinal cord.

In the course of my own researches on this subject, ten years ago, after having ascertained these data to be perfectly correct, I made the remark, that the division of this nerve produced an increased activity of the circulation on the corresponding side, which grew warmer, and in certain animals (the horse, for instance) was bathed with profuse perspiration; while, on galvanizing its upper portion, the contrary effect was produced. It was on this occasion that the influence exerted by the nerves of organic life upon the temperature of animals was for the first time brought to public notice; and numerous experiments have since then shown that considerable variations may in this manner be produced; they extend to 10° or 12° Cent. (18° or 22° Fah.).

Professor Jacubowich, whose labours on the structure of the spinal cord are well known to you, believes this nervous centre to contain three different kinds of primitive cells. Some of these are radiated, or multipole; they are also the largest; he considers them as the source of the voluntary motor nerves; others are of smaller dimensions, and provided in general with only three poles. These he believes to be exclusively connected with sentient nerves; and, lastly, a third sort of cells is found in the spinal axis. They are lengthened and fusiform, and exhibit two poles or extremities; these cells, according to the ingenious micrographer, give rise to the nerves of organic life. It would therefore appear that anatomy confirms again, in this case, the results of physiology, by showing us, in the spinal cord, the primitive source of these distinct systems of nerves—that of sensation, that of motion, and, lastly, that which acts upon the vessels.

The researches of other physiologists with reference to the

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remaining branches of the sympathetic nerve having fully corroborated the above-mentioned results; we shall, in future, take them for granted, and proceed to examine, on these grounds, the influence of the spinal cord on the chemical phenomena of life, after performing, in your presence, the experiments on which these views are grounded.

ORIGINAL COMMUNICATIONS.

ON AURAL DIAGNOSIS AND DISEASES OF THE MASTOID PROCESS.

By W. R. WILDE, M.D., V.P.R.I.A.,
Surgeon to St. Mark's Hospital, Dublin, &c.

I WISH to make a few observations upon Mr. Toynbee's communication in the number of the *Medical Times and Gazette* for March 16, upon "The Means of Preventing Caries of the Petrous Bone, and the Formation of Abscess within the Brain in Cases of Disease within the Ear." As everything appearing from so high an authority must be received and studied with attention by the Profession at large, it becomes the more necessary to examine carefully every assertion or dogma which may appear from the pen of my respected friend. The questions involved in Mr. Toynbee's paper are twofold—the means of diagnosis, and the best method for preventing the disastrous consequences specified in the heading of his communication. Some years ago Mr. Toynbee promulgated the doctrine that disease in certain portions of the middle and internal ear produced disease in certain portions of the brain; or, as he now himself tersely expresses it, that when matter "is pent up in the tympanum, it affects the cerebrum; when pent up in the mastoid cells, it affects the cerebellum; and when in the vestibule, it affects the pons varolii and base of the brain." From this doctrine I have long since dissented, on the principle of the Scotch verdict, "*non proven.*"

Under what circumstances is matter pent up in the cavity of the tympanum?—that is, with the membrana tympani intact,—otherwise it would not be pent up. In catarrhal and chronic inflammations of the mucous lining of that cavity, when the fluid is principally muco-purulent, it is either absorbed or makes its way into the external meatus by ulceration or rupture of the membrana tympani. In acute inflammation of the tympanum, attended with violent pain, and ending in suppuration, it usually produces, in a short time, rupture of the membrana tympani; but whether by ulceration, or like the bursting of an abscess through the skin by pressure from the rapidly accumulating pus, is more than I can say. Specific inflammations, such as those from scarlatina and measles, etc., may all be classed under these two heads, so far at least as the question in hand is concerned. Does disease of the bones of the ear or of the brain usually appear without previous otorrhœa, or rupture of the membrana tympani and profuse discharge? As a general rule, it does not; in some cases it so happens; but I cannot now discover in my notes the record of a single fatal case in which disease of the mastoid process, or the petrous portion of the temporal bone, or the brain or its membranes, as a consequence of aural disease, ensued, in which otorrhœa had not previously existed to a greater or less extent.

In cases, then, of otorrhœa, with perforate membrana tympani, is the discharge occasionally pent up and forced into the mastoid cells, and does it produce, from want of a means of external exit, disease of the brain? That it does is contrary to my experience; but Mr. Toynbee says, "I have met with several cases in which death occurred from diseased brain, where there was no other impediment to the free escape of discharge than the inspissated secretion itself, and where the free use of the syringe would have averted the mischief to the bone and the brain." This I think rather too mechanical an explanation; my view of such cases (which occur here very frequently) is that, from some cause—local or constitutional—at present unknown to us (but, in some cases attributable to improper interference), an unhealthy action is set up in the organ, which produces caries in the petrous, or disease of the mastoid process of the temporal bone presenting some of the various forms which I have already described in my "Aural Surgery." I believe it much more likely that the inflammatory suppurative action spreads into the mastoid cells than that the discharge in the tympanum is forced in mechanically by being pent up. To obviate the consequences alluded to, Mr. Toynbee recommends, in cases of ruptured membrana tympani, "directing the stream of water [in syringing] through the orifice of the membrane into the tympanum in order to vacuate the latter cavity of its contents." This is an achievement, I am afraid, we cannot always lay claim to, as, in syringing, the stream of water fills the meatus, no matter how it is directed. The next proposal is "by means of a curved probe [passed into the mastoid cells], to endeavour to make exit for the matter though the natural channel into the tympanum. By this means it is possible, in some cases, where the mucous membrane is not very thick, to secure the withdrawal of matter from the mastoid cells." I have never performed such an operation, nor seen it performed by others; I can, however, suppose it possible with the patient under chloroform, although not unattended with risk, if the probe could be pushed far enough and was curved sufficiently, and that the operator could succeed in thrusting it into one or other of the mastoid openings.

Mr. Toynbee objects to making an orifice in the membrana tympani, supposing it to be perfect in such cases "as inflammation of the dura mater may be induced." Surely, thrusting a probe into the mastoid cells, the roof of which, although of very hard bone, is not much thicker than writing paper, would be a more hazardous proceeding! I have often thought that an aperture might with propriety be made in the membrana tympani in cases of acute scarlatinous tympanitis.

The foregoing methods failing or being inapplicable, Mr. Toynbee recommends the use of a seton, and quotes a case in which he used it, and in which he says, there had been "*unmistakeable symptoms of matter in the mastoid cells*, attended with attacks of giddiness, insensibility, and intense pain in the head," etc. I have carefully read the case alluded to in Mr. Toynbee's valuable work on "Diseases of the Ear," and I confess I have failed to discover in the array of symptoms any which would enable us to make a differential diagnosis between matter in the mastoid cells, or disease going forward in any other portion of the bone of the ear; or, as would appear to be the case in that instance of disease of the brain and its membranes. In the majority of the cases in which I have had occasion to cut down upon the mastoid process, or into the mastoid cells (at least, of late years, when the Practitioner and the public are more alive to the importance of such cases, and seek relief earlier than formerly), but few of the symptoms related by Mr. Toynbee have been present, although there could be no doubt as to the seat or nature of the disease.

Three weeks ago, a woman, aged 55, who had long suffered from otorrhœa, walked some three miles into Hospital, and presented a large, reddish post-aural tumour, exquisitely painful to the touch, and of a brawn-like feel. There was no sense of fluctuation; but on pressing the finger firmly, as it was drawn over its surface from above downwards, an indentation could be perceived, the mark of which remained for a few seconds after the finger was removed. She had hemicrania and soreness of the scalp on the affected side, with some fever, sleeplessness, and the usual anxiety and distress of countenance so characteristic of such cases. The otorrhœa had not ceased, and there was an aperture in the lower edge of the membrana tympani, which was thickened. On introducing a scalpel down to the mamillary process it sunk to the depth of an inch, and on drawing it upwards parallel to, and about half-an-inch from the auricle, it passed freely into the substance of the bone, which in this, and in all such cases, cuts like the crust of old Stilton cheese. A few thick drops of matter flowed out with the hæmorrhage, which in such cases is generally profuse, and the next day there was a copious discharge from the wound. The case recovered perfectly without any apparent exfoliation, although like all such cases there was subsequently an indentation over that part, as if from absorption of the bone.

The week before last Mr. Dwyer, of Camden-street, formerly a pupil of mine, called upon me to "cut down upon a lady's mastoid process." On proceeding to her residence, I found an emaciated person, with languid circulation, great distress of countenance, slight otorrhœa, soreness of the scalp on the right side, and some pain, increased on pressure, over the mastoid region, and extending down

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along the track of the muscles into the neck. Immediately behind the ear it was slightly pinkish and exquisitely painful to the touch, but not much swollen. I made an incision down to the bone for about an inch in length, incising the periosteum freely. No matter followed, nor did the wound even suppurate. The patient was put upon the use of bark and ammonia, with generous living. She experienced immediate relief, slept better that night than she had done the week previously. The pain and all the other local symptoms ceased gradually, except the swelling and soreness along the course of the sterno-mastoid muscle.

On Friday, March 22, a healthy young woman from the country, presented herself at St. Mark's Hospital, complaining of violent pain in and behind her ear, of three months' duration; not continuous, but seldom altogether absent; it occurred suddenly at night, and was very violent for a few days, both in the ear and mastoid region. She was very properly leeched in the latter spot by Dr. Wade, of Kilcock. That treatment was attended with relief, and was resorted to on two subsequent occasions. She has never had any discharge from the ear. The meatus was dry, and towards its distal extremity reddish; the membrana tympani had a dusky reddish-brown colour, especially towards the upper and back segment. It did not appear to be pressed outwards by any fluid or other substance in the cavitas tympani. The introduction of the speculum, for the purpose of examination, caused no annoyance. The whole seat of distress was the mastoid process, the pain of which was, she said, most exquisite. She would scarcely allow it to be touched, the integuments over it were thickened, œdematous, and of a dusky hue, giving a brawny feel to the fingers. The pain and swelling occupied a space of about three inches by two; the immediate angle with the auricle was neither so painful nor thickened as the other portions of the mastoid region; there was no feeling of fluctuation, no hemicranial soreness, but some swelling and tenderness, extending along the course of the sterno-cleido mastoid muscle. She had no headache or giddiness at any time during the progress of the case; her sole complaint was of the pain and tenderness over the mastoid process and in the ear. She presented the usual anxiety and distress of countenance peculiar to such cases. There were no constitutional symptoms present. She readily submitted to an operation. A scalpel was introduced near the mamillary process down to the bone, and drawn upwards, parallel with the auricle for about an inch and a-half. The depth of the wound was about half an inch. The bone felt softish under the knife, the point of which could be easily pressed into it at any point of the trajit of the incision. No matter was perceptible, neither did it appear that the periosteum had been detached. The cut edge of the wound had the usual brawn-like appearance. As there was rather smart hæmorrhage, the gap was plugged with lint. Immediately after the incision was made, the patient had a slight convulsive fit, but did not appear to be at any time perfectly unconscious. She was taken into Hospital, and placed in bed. When visited in the evening, she expressed herself greatly relieved by the operation, the pain being much less than formerly. She was put upon the use of bark and ammonia, with generous living, and a poultice applied over the wound, but the anxiety of face did not leave her for four days subsequently. No discharge appeared from the wound till the following Monday, and the pain over the mastoid region continued, although less intense. She was put on the use of calomel and opium, until the gums were slightly touched. On making pressure close to the wound on Tuesday the 26th, about a teaspoonful of matter was evacuated, and during the afternoon some more followed. The face had assumed its natural cheerful expression and the patient got the first sound sleep she had enjoyed for a fortnight; the discharge then ceased, the wound healed by granulation, and the case went on well till the 30th when she had rigors, and was very restless and sleepless, and complained greatly of pain and swelling immediately below the ear. That region was on the following day very much swollen, red, and painful, owing probably to inflammation of the dense fascia covering it. She was changed to a different apartment, and flannel wrung out of very hot water was kept applied to the seat of pain; the use of tonics was continued. In a few days all pain subsided, and she left the Hospital perfectly well.

Even in cases in which there is neither swelling nor redness, but pain decidedly increased on pressure over the mastoid region, I either have leeches applied, or I cut down upon the bone as described above. Some time ago a professional friend waited upon me with his daughter, a delicate, light-haired, fair-skinned girl of about 15, who complained of pain and swelling behind each ear. The mastoid regions were exquisitely tender to the touch; a slight, pinkish blush overspread their surfaces, and on the right side there was a very manifest swelling, but no sense of fluctuation.

I cut down upon the bone in the usual manner, and in the hæmorrhage which followed could be discerned some streaks of pus. The surface of the bone felt rough as the point of the scalpel passed over it. As the young lady suffered a good deal from the pain and shock of the operation, it was agreed not then to incise the mastoid region on the other side, but to apply leeches instead. Three or four days afterwards I had to cut down upon the bone on the left side also; a considerable discharge ensued from both sides. She recovered perfectly in about three weeks, and has remained so since. She had had some slight otorrhœa occasionally up to the time of her attack. She had no head symptoms previous to the time I saw her, and very little fever subsequently.

My late venerated friend, Andrew Retzius, having seen me in 1855, "as a matter of course, open the mastoid cells with a scalpel in a case of inflammation of their internal investing membrane, in order to give exit to the morbid inflammatory secretion, and thus remove the tension, relieve the severe pain, and allay the inflammation," says, "I was glad to observe that the operation was very easily performed and that the results were favourable." In consequence of this and other cases to which I drew the learned Swede's attention some years ago, he read a paper to the Scandinavian Scientific Congress in 1856, "On the Occurrence in Man of Cavities in several Different Parts of the Bony Wall of the Tympanum," of which a translation has been made by my friend, Dr. W. D. Moore, in the *Dublin Medical Press* for December, 1859, to which I would particularly direct the attention of my readers.

If there was any well-marked symptom, local or general, or any array of symptoms besides those which I have specified above, by which we could diagnose disease arising spontaneously in the mastoid cells or passing into them from the cavity of the tympanum, it would, I think, be a step in advance in Aural Medicine, less in importance only to that of the discovery of a means of the prevention of disease in these cavities.

RESULTS OF SOME TRIALS OF THE HYPOPHOSPHITES IN THE TREATMENT OF PHTHISIS.

By JAMES RISDON BENNETT, M.D.
Late President of the Hunterian Society.

(Continued from page 468.)

Peter H., aged 40, a gardener, residing at Surbiton, a man of dark complexion. Height, 5 feet 6 inches; weight, 9 st. 12 lbs. His wife and a brother have died of phthisis. Has been failing in health six months, and has had hæmoptysis and night sweats, with alteration of voice, cough, and expectoration, and has lost flesh. The bowels are generally regular, the appetite tolerable. Pulse 104. The respiration was everywhere deficient in the upper and anterior region of the chest, but no moist sounds were heard. The treatment by the hypophosphite of soda was continued only fourteen days, when it was requisite to abandon it, in consequence of derangement of the digestive organs and the prominence of the laryngeal symptoms. He continued to get worse during his whole residence in the Hospital, and when he left, on June 11, had lost 5½ lbs. in weight.

Ann B., aged 33, a mould-maker, residing at Limehouse, was admitted February 4, 1860. Weight, 7 st. 4 lbs. Some relations on the mother's side have died of phthisis. She dates her present illness from twelve months ago, but admits that six years ago she had an attack of severe hæmoptysis, and for five years she has been out of health; and for three years has had more or less cough, which has been much worse for the last year, and attended by copious expectoration. Her general health has lately rapidly declined, and she has had much night-sweating. Her aspect is anæmic,

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and the emaciation marked. Tongue pale, tolerably clean; appetite good. Bowels generally confined. Pulse 120, feeble. Catamenia absent three months. Cough urgent at night. The physical signs were marked as indicating extensive breaking down of the left apex, viz.—flattening, gurgling, amphoric cough resonance, etc.; and on the right side, deficient percussion resonance, harsh respiration, cough resonance, and crepitation, both above and below the clavicle. She was put on mixed diet, with half-a-pint of porter, and ordered a sedative draught at night for the cough, with fifteen grains of the hypophosphite of soda in inf. quassiæ ter die., liq. vesicat. infra clav. She lost weight, and steadily deteriorated under this treatment, so that on March 4, when her debility was becoming great, and the night sweats severe, she was ordered quinine and steel, and allowed wine, etc. On March 26 she left the Hospital at her own desire, having lost 8 lbs. in weight, and the disease rapidly progressing.

Wm. B., aged 20, grocer. Residing at Ratcliff, light complexion, weight 8 st. 6 lbs. Dates his illness from two months back, and has since then been declining in health, but had hæmoptysis ten weeks ago. For six weeks has had copious expectoration and frequent night sweats. Loss of voice two weeks. His aspect is pale, and he is evidently emaciated. Tongue somewhat coated; bowels regular; appetite fair. Cough urgent at night, and expectoration tenacious and mixed with blood. Pulse 120. Percussion gives a certain degree of tympanitic resonance under the right clavicle, where there is cavernous respiration. Much creaking and rhonchus in the dorsal region, and more or less rhonchus throughout the chest. Under the left clavicle the indications are those of early tuberculization. Has old indolent ulcers of both legs. He was put on mixed diet with half-a-pint of porter, and was ordered gr. xv. of the hynophosphite of soda in water three times a-day. Subsequently a sedative draught at night was absolutely needed to obtain rest. Under this treatment his general condition deteriorated so rapidly, and the physical signs showed such advance of the local disease, that it was abandoned on the 14th March. At this time he was put on bark and dil. sulph. acid, with cod-liver oil and opiate astringents at night. For a brief period he appeared to be much relieved, and took his food much better; but on April 12 it is noted that his emaciation and exhaustion have gradually increased. The bowels are frequently relaxed to such an extent as to require the use of every available means to control them, and on the 13th, at his own request, he went home to die.

H. L., aged 22, female servant. Admitted February 3, 1860. Residence Chigwell. Complexion dark. Weight 7 st. 4 lbs. Previous health pretty good. Present illness began seven months ago by an attack of pleuro-pneumonia and some hæmoptysis. Cough and scanty expectoration. Catamenia have been occasionally profuse, but absent for six months. Her aspect is very pale. Appetite poor. Tongue coated and patchy. Bowels regular. Cough troublesome at night. Expectoration scanty. Pulse 140. The physical signs indicated the remains of pleurisy of left side, with some crepitation and deficient resonance under the clavicle. The case was marked as commencing phthisis, with remains of pleuro-pneumonia. She was placed on mixed diet, with half-a-pint of porter, and ordered a sedative draught for the cough at night, and twenty grains of hypophosphite of soda in infus. quassiæ, ter die. On February 28, there being a good deal of pain and tenderness, liq. vesicatorius was applied under the clavicle, and subsequently to the side also, for similar symptoms. Until towards the end of February she gained a little in weight, but about that time all the symptoms became worse. Crepitation under the clavicle was more extended, the cough worse, and the expectoration mixed with much blood, and the feet became œdematous. On the subsidence of the more acute symptoms, she was placed on the usual tonic treatment. The disease, however, advanced, and when she left the Hospital on March 20 she appeared to be getting rapidly worse. This would seem to have been a very fair case for testing the power of the new so-called specific, inasmuch as the tuberculization of the lungs was apparently only commencing when the treatment began, and the constitutional powers so far unimpaired that they responded to the good diet and the favourable circumstances in which she was placed on first entering the Hospital. The pulmonary symptoms, however, steadily advanced, and the tuberculosis pursued its course.

George B., aged 30, saddler, residing at Paddington, was admitted on March 26. Weight, 7 st. 12 lbs.; complexion light; previous health, delicate. He states that for seven years he has been more or less out of health; that about that time he had hæmoptysis; that for five or six months he has had constant cough, attended by expectoration, with only occasionally night sweats. His aspect is pale and emaciated; tongue somewhat coated; bowels confined; appetite fair; cough not urgent; expectoration moderate; pulse 130, very feeble. Physical examination of the chest revealed marked flattening and deficient resonance of both apices, with cough resonance and crepitation, especially on the right side. Mixed diet, half-a-pint of portar, sodæ hypophosph. gr. xv. ter die, in infusion of quassia, sedative draught at night. April 16.—Confined to bed, debility rapidly increasing, tongue very red, bowels very irritable. Physical signs indicative of excavations rapidly extending in both apices. He was now put on the steel and quinine mixture, with small doses of laudanum, and allowed ʒij. brandy. Two days later, feeling that he was rapidly sinking, he left by his own desire.

Eliza K., aged 19, female servant, residing at West Green. Her health was good till three years ago, since which time she has had more or less cough. Two months ago had severe hæmoptysis; latterly her health has declined rapidly, and has had night sweats to a great extent for three months. Considerably emaciated, tongue coated and flabby, bowels regular, appetite pretty good, cough frequent, and attended by scanty, thick, yellow expectoration. Some time ago, she says that her expectoration was very great. Pulse 120, feeble. On the left side there is tympanitic resonance on percussion, with flattening; considerable cough resonance, and some small crepitation. Above the right clavicle there is increased vocal resonance, with harsh expiratory murmur, and under the clavicle an occasional click. She was placed on mixed diet, with half-a-pint of porter, and ordered steel and cod-liver oil, and the liq. vesicatorius was applied over the right apex. This treatment it was necessary to intermit on January 2, in consequence of dyspeptic symptoms. During the month of February she complained a great deal, at intervals, of pleuritic pains, and the tincture of iodine and liq. vesicatorius were frequently employed for their relief; but, towards the end of the month, she had gained 5 lbs. in weight, and her general health, as well as the dyspeptic symptoms, improved whilst taking the stomach mixture, i.e. infus. gentianæ et rhei. with soda and small doses of dilute hydrocyanic acid. On March 1, as her digestive organs still did not bear the ordinary tonic remedies, and she was not progressing, I ordered her fifteen grains of the hypophosphite of soda in infusion of calumba three times a-day. On March 26 she had lost 3lbs. of the 5lbs. which she had gained, and the physical examination showed that the pulmonary disorganization was advancing. She, therefore, left the Hospital.

PRACTICAL HINTS ON THE ACCOMMODATION OF THE EYE, ITS ANOMALIES AND THEIR TREATMENT.

By Mr. J. SOELBERG WELLS.

(Continued from p 415.)

Myopia *(Concluded.)*

Short-sighted persons often inquire whether they may wear spectacles. Now, all Practitioners are, I think, agreed as to the advisability of allowing myopic persons spectacles, for the purpose of seeing distant objects. For we thus change their eyes into normal ones, and enable them to unite parallel rays upon the retina. We should, however, prescribe the weakest glass with which the patient can see clearly and distinctly at a distance, so that he may only make use of a minimum of his power of accommodation, and not have to strain it unduly when observing near objects. For we must remember that he will but seldom have to look for any length of time at a distance, but will alternately observe near and distant objects. One moment looking at something on the opposite side of the street, the next into a shop window, or at some object near at hand. Now, if the glasses are too strong, he is already obliged to use more than a minimum of his power of accommodation when observing distant objects, and will consequently have to make use of a still greater amount (perhaps

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almost the whole) when looking at things but a short distance from him. His myopia will therefore soon increase.

There can also be no harm in allowing short-sighted persons glasses for the purpose of seeing things at a few feet distance (*e. g.* playing the piano, etc.)

But the patient may also desire spectacles for reading, writing, etc. Now Donders thinks that although it is advisable to give myopic persons at first weaker glasses for reading than for distant objects, we should at a later period, if their range of accommodation be good, give them (even for reading) spectacles which completely neutralise their myopia.

It is still, however, a much debated question whether short-sighted persons should be allowed glasses for reading, writing, etc. Donders strongly recommends it (except in exceptional cases) for the following reasons :—

1. Because strong convergence of the optic axes is necessarily paired with tension of the accommodation. The latter is an associated action, not arising from the mechanism of the convergence, but existing within the eye itself, and may consequently easily lead to an increase of the myopia. Besides this, the pressure of the muscles upon the eyeball appears to be greater when the optic axes are convergent than when they are parallel, and this increase of pressure cannot but tend to give rise to the development of posterior staphyloma.

2. On account of the habit which short-sighted persons have of bending their head forwards during reading or writing. This must cause an increased flow of blood to the eye and an increased tension within the eye itself. Owing to this the development of sclerotico-choroiditis posterior, effusions of blood, and detachment of the retina, which are so apt to occur in short-sighted persons, are undoubtedly greatly promoted (a). For this reason we should always tell these patients to read with their head well thrown back and to write at a sloping desk.

But it may, on the other hand, be urged that it is just in looking at near objects that myopic persons have an advantage, for they can see them remarkably distinctly. And the great danger is, that after reading for a short time with spectacles, the patient on getting somewhat fatigued will, instead of laying the book aside, approach it nearer to the eye, in order to gain greater retinal images, and thus strain and tax his power of accommodation too much. If we, for instance, give a patient, whose far point lies at 8″, a pair of spectacles which enable him to read at 12″, he will, if not very careful, after a short time almost insensibly bring the book nearer to his eyes, and thus have to make use of a greater amount of accommodation. If he does this frequently, he will soon increase his myopia. The greater the range of accommodation, the less harm will spectacles do, and *vice versâ*.

We, however, find that this inclination to approach the objects much nearer does not exist so much in patients who have been long accustomed to wear glasses for near objects, and whose range of accommodation is good. In these cases, particularly if they do not suffer from amblyopia, we may permit them to continue the use of glasses.

We may also permit the use of spectacles for near objects in those cases of myopia in which asthenopia (dependent upon insufficiency of the internal recti muscles) shows itself after the patient has read or worked for a short time.

A person comes to us, for example, with a myopia $= \frac{1}{8}$ (his far point lying at 8″ from the eye), and complains that after he has been reading for a short time (without glasses) the letters become confused and appear to run into each other, so that he is obliged to lay the book aside. We tell him to fix his eyes upon our uplifted forefinger, and gradually approach this nearer and nearer to his eye, at a distance of 6″; one eye (after a short time) gradually deviates outwards. The same occurs if we cover one eye while the patient is looking at the object at 6″. The eye covered by the hand moves outwards, perhaps 1‴— 2‴. This shows that the internal recti are not sufficiently strong to keep up the requisite amount of convergence at 6″. If we now, however, give the patient a pair of concave glasses, which enable him to read at a distance of 12″ — 14″, the amount of convergence (and consequent action of the internal recti muscles) will be proportionably decreased, and he will be able to continue reading with ease and comfort. We must, however, remember that we do not by this means cure the evil, for the spectacles act only as a palliative. We may cure it either by the use of prismatic glasses, or by a tenotomy of the external recti.

The prisms are to be applied with their base turned outwards, so that the rays of light will impinge upon a portion of the retina to the outer side of the yellow spot, for the eye will then be moved inwards in order to bring the rays once more upon the macula lutea. In this way the internal rectus will be exercised, and in time strengthened. This plan, however, demands great patience and accuracy, both on the part of the Medical man and patient, and the latter generally soon gets wearied of these continued exercises. It is, therefore, better to divide the external rectus, for by this means we lessen the resistance which the internal rectus has so overcome, and thus indirectly strengthen the latter.

While such cases of myopia may be furnished with spectacles for near objects, it is very dangerous to permit their use in patients whose range of accommodation is very limited, and who, moreover, suffer from such an amount of amblyopia (generally dependent upon sclerotico-choroiditis posterior) that they cannot read No. 4 or 5 of Jäger, even with the most carefully and accurately chosen glasses; for these patients will bring the object very near in order to get larger retinal images. Their accommodation will thus be greatly strained, the intra-ocular tension will be increased, and great mischief will soon ensue. If much amblyopia exists, they should not be permitted to use their eyes for near objects.

There is, perhaps, no disease of the eye which requires greater tact and management, greater "nursing," coporeally and mentally, than sclerotico-choroiditis posterior. I may, therefore, be excused for shortly mentioning the chief diagnostic symptoms of this affection.

The patient is generally exceedingly short-sighted; he may have become so gradually, or the myopia may suddenly have increased. He frequently complains of a sensation of fullness and tension within the eye, as if the latter "were too large for the socket." The eyeball appears longer, larger, and more oval, the eyelids are widely apart, the hollow which appears, in a normal eye, between the outer canthus and the eyeball, when the latter is much turned inwards, has disappeared and the posterior portion of the eye looks square. The lateral movements of the eye are less extensive than normally. These symptoms are, however, not always to be depended upon diagnostically, and we can only with certainty diagnose this disease by means of the ophthalmoscope. The characteristic symptom is then found to be the presence of a white crescent at the side (almost always the outer) of the optic nerve entrance, which gradually extends more and more towards the yellow spot, and also around the optic nerve entrance, so that at a later stage the latter may be surrounded by, or embedded in, a more or less broad, white, glistening ring, extending more particularly in the direction of the macula lutea. The retinal vessels appear more clear and defined as they traverse this white portion; this is due to the white background furnished by the sclerotic, shining through the choroid which is here denuded of its pigment. At the edge of the crescent we see irregular patches of pigment strewn about. We must, however, be careful not to diagnose every little white rim at the edge of the nerve entrance as sclerotico-choroiditis posterior, for this may be caused simply by the choroid receding somewhat from the entrance and permitting the light to fall at this spot through the retina upon the sclerotic, and thus causing the appearance of a white, glistening rim. But this arc is very narrow, and there are no appearances of atrophy of the choroid, irregular patches of pigment, etc.

The patients are generally very myopic, and extremely anxious and nervous about their eyes. They are often continually haunted by "blacks" floating before their eyes, which may assume all kinds of fantastic shapes, and are due to opacities in the vitreous. At other times they are greatly disturbed by showers of bright, brilliant stars and flashes of light. They are generally weak-sighted, and are much dazzled by bright light: this is due to the want of pigment at certain portions of choroid, and may be greatly relieved by the use of blue spectacles. Now, although we may much alleviate most of these symptoms by means of constitutional treatment, together with great rest of the eyes, artificial leeches, eye-douches, etc., there are yet some cases in which, on account of peculiarity of constitution or extreme debility, the best and most reliable of these remedies may be inapplicable, and we can then only advise the

(a) Graefe's "Archiv.," iv. 1, 312.

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patient rest, confidence, and hope. But how few are there whose sense is sufficiently strong, whose confidence in their Medical attendant sufficiently firm, to await in apparent inactivity a more favourable turn in their diease! Many patients of this class run about from one oculist to another, until their mind is so unsettled by, may be, conflicting advice (professional and non-professional), that their state of anxiety really becomes pitiable.

We should always regard the opacities in the vitreous with anxiety if they are numerous, or very diffuse, and if the myopia is progressive. They very often lead to detachment of the retina, which, indeed, but too frequently occurs in the later stages of sclerotico-choroiditis posterior. This is undoubtedly often due to the fact, that if the retina does not follow the traction of the choroid and sclerotic (which bulge posteriorly), fluid is effused between the choroid and retina, and the latter detached. The exudation may, however, burst through the retina into the vitreous without detaching the former.

Although the vitreous body generally becomes fluid only at its posterior portion, the synchysis may occasionally (though rarely) extend to the whole of the vitreous.

The opacities may be of various kinds. The patient at first, perhaps, only notices a dark speck which he cannot wipe away; afterwards there may appear thin flaky membranes, which float about before the eye, assuming different forms and positions with its every movement. With the ophthalmoscope we can readily distinguish them as dark, fixed or floating bodies, of various shapes and sizes. Sometimes, however, they are so delicate and fine that we cannot individualise them, the fundus appearing more or less hazy.

A more dangerous form of opacity is that in which the vitreous becomes suddenly and diffusely clouded, so that we cannot illuminate any portion of the retina thoroughly, the whole looks clouded and indistinct. These sudden attacks of haziness may recur several times, and then, when it at length disappears, and we can again examine the fundus with the ophthalmoscope, we but too often find that the retina has become detached!

H. Müller has pointed out (b) that the detachment may not only occur through the pressure of fluid from behind, but also through traction from before. The latter happens thus; when the exudations in the vitreous body shrivel up and retract, they draw the retina forwards and detach it from the choroid.

At a later stage of the disease we may have an opacity at the posterior pole of the lens, cataracta accreta, and phthisis bulbi.

Another danger in sclerotico-choroiditis posterior is that, in old persons, the eye may become glaucomatous. As the sclerotic gets thicker and less elastic in advancing years, it cannot yield, perhaps, at a certain stage any more to the increased intraocular pressure, it cannot as before bulge out; the consequence is, that the increased pressure acts upon the next least resistant part, the optic nerve, this becomes cupped, and the eye glaucomatous.

From this slight and necessarily imperfect account of the phenomena which may accompany sclerotico-choroiditis posterior, the reader will see how guarded our prognosis, how watchful and strict our treatment should be when the disease is at all advanced.

We should, above all things, warn such patients against working for any length of time at near objects, or with their head bent forward, for venous congestion within the eye is thus easily produced. If they are allowed spectacles for near objects, we must also point out the danger of bringing the object too near the eye. In extreme cases we should strictly forbid all work at near objects with or without spectacles. Our treatment should consist in the administration of bichloride of mercury, derivatives acting on the skin and kidneys, the application of artificial leeches to the temple, the eye douche, blue spectacles, rest of the eyes, etc., etc.

I have just mentioned that blue spectacles effectually relieve the "dazzling" which many of these patients experience. It was formerly supposed that the red rays of light were the most annoying and trying to the eye, and consequently green glasses (which exclude the red rays) were much *en vogue*. Now, however, it is a well known fact that it is not the red but the orange rays which are irritating to the eye, and as blue excludes the orange rays, this is the proper colour for such spectacles. London smoke glasses are now much worn and highly recommended in England. They are undoubtedly very serviceable in those cases in which we desire to subdue and diminish more or less the whole volume of light and colour, because they exclude a certain amount of every colour, and thus have the same effect as if we place the patient in a darkened room. But this is not generally necessary, or even in fact desirable, in sclerotico-choroiditis posterior, for we only want to cut off the irritating orange rays, which appear to contribute but very little, if at all, to our power of distinction, for we can read with blue spectacles just as far as with the naked eye, which is by no means the case with smoke glasses. The blue tint should generally be but slight.

(To be continued.)

(b) Archiv. iv. 1, 372.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

CONDUCTED BY

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Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital,

AND BY

J. HUGHLINGS JACKSON, M.D.

STATISTICAL REPORT OF OPERATIONS PERFORMED DURING THE YEAR 1860.

The subjoined Report comprises the cases supplied by the following Provincial Hospitals:—

The Derby, Leeds, Leicester, Sussex County, Addenbrooke's (Cambridge), Nottingham, Chester, Cheltenham, West Norfolk and Lynn, Sheffield, Hull, York, Northampton, Cumberland, and Gloucester.

AMPUTATIONS BELOW THE KNEE.

Case 1.—The Cumberland Hospital: Mr. Page.—A man, aged 35. Amputation two and a-half inches below the knee, for malignant disease of the tibia. The bleeding was controlled by three acupressure needles, which were withdrawn in seventy-one hours. *Case* 2.—The Cheltenham General Infirmary: Mr. Eves.—A boy, aged 14. Amputation by single flap close to the ankle, for gunshot wound. Under treatment. *Case* 3.—The Cumberland Hospital: Mr. Page. A man, aged 38. Amputation of the leg, for compound comminuted fracture. The thigh also was much contused. The bleeding was controlled by acupressure needles. Afterwards he had extensive suppuration extending to the middle of the thigh, which was treated by free incisions. Recovery. *Case* 4.—The Liverpool Royal Infirmary: Mr. Long.—Lucy B., of very decided strumous habit. Disease of the ankle-joint for several years. Amputation. Recovery. *Case* 5.—The York County Hospital: Mr. Keyworth.—A man, aged 40. Caries of the tibia near the ankle-joint. Amputation of the leg (rectangular). Slight sloughing of the angles of the flap. *Case* 6.—The Leicester Infirmary: Mr. Macaulay.—A man, aged 29. October 29; Primary amputation (circular) on a line with the tubercle of the tibia. October 31; "Flaps discoloured." November 1: "Nearly the whole of the flaps evidently gangrenous." 6th: Sloughs separated. He left the Hospital well February 12, 1861. *Case* 7.—The Derby Hospital: Mr. Fearn.—A man, aged 21. Strumous disease of the tarsus. (Chopart's operation had been performed.) Amputation (rectangular) in the upper third of the leg. Secondary hæmorrhage. Ligature of the femoral on the fifth day. The hæmorrhage returned. The stump was opened, and the vessels tied. Recovery. *Case* 8.—The Derbyshire General Infirmary: Mr. Fearn.—A lad, aged 14. Strumous disease of the left foot, strumous abscess near the spine, caries of ribs. Amputation of the leg in middle (Teale's method). The stump healed, but incontinence of urine came on, and paraplegia. Under treatment. *Case* 9.—The Sussex County Hospital: Mr. Lowdell. A

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man, aged 21. Strumous disease of the astragalus and os calcis for many months. Amputation. Secondary hæmorrhage came on on the second day. Stump opened. Under treatment. The wound fast healing. *Case* 10.—The Leeds General Infirmary: Mr. Smith. A man, aged 24. Amputation immediately below the knee for smash of the leg. Flap taken from the calf. Recovered well. *Case* 11.—The Leeds General Infirmary: Mr. Hey. A man, aged 31. Amputation twelve and a-half hours after the accident (rectangular) above the ankle, for smash of foot and ankle. Recovery. His recovery was retarded by cellular sloughing and formation of abscesses in various parts of the limb. *Case* 12.—The Leicester Infirmary: Mr. Paget. A man, aged 29. Two years before Syme's operation was performed for disease of the ankle-joint. Sinuses leading to carious bone for about four inches above the ankle. He was emaciated, pale, and had hectic symptoms. Amputation (long posterior flap). Recovery. *Case* 13.—The Leeds General Infirmary: Mr. Smith. A girl, aged 20. Amputation (rectangular) through the lower third of the leg for old disease of the ankle. Recovery. Simpson's acupressure needles were used. Good union occurred, and an excellent stump resulted. *Case* 14.—The Leeds General Infirmary: Mr. Teale. A man, aged 48. Amputation (rectangular) above the ankle for old disease of foot. Acupressure needles were used. Rapid recovery. *Case* 15.—The Leeds General Infirmary: Mr. Teale. A man, aged 51. Amputation (rectangular) through the leg for old disease of the foot and ankle. Acupressure needles were used. Recovery was retarded by cellular sloughing in the leg. Stump excellent. *Case* 16.—The Leeds General Infirmary: Mr. Smith. A man, aged 22. Amputation (rectangular) through leg for strumous disease of ankle. Free suppuration delayed his recovery, but an excellent stump was obtained. *Case* 17.—The Leeds General Infirmary: Mr. Smith.—A man, aged 35. Amputation (rectangular) at the lower third of leg for disease of the ankle-joint. Although half the anterior flap sloughed, sufficient remained to completely cover the ends of the bones, and before leaving the Hospital he could bear a considerable amount of pressure on the ends of the stump. Recovery. *Case* 18.—The Leeds General Infirmary: Mr. Teale.—A girl, aged 15. Amputation (rectangular) for disease of the ankle-joint. Recovery. *Case* 19.—The Hull Infirmary: Dr. Lunn. A boy, aged 9. Severe injury of the leg. Amputation (flap) below the knee. Recovery. *Case* 20—Addenbrooke's Hospital: Dr. Humphry.—A lad, aged 12 (see Excision of Joints, Case 8). Amputation above the ankle. Recovery. *Case* 21.—The Leicester Infirmary: Mr. Macaulay. A man, aged 50. Four months before he had a compound dislocation of the ankle from a colliery accident. This was followed by inflammation of the joint. On admission there was great tumefaction of the foot and leg, and discharging sinuses communicating with the joint. He was very feeble, much emaciated, and had night sweats. Amputation (circular) upper third of leg. Recovery. *Case* 22.—The Chester Infirmary: Mr. Brittain. A man, aged 25. Amputation (circular) for injury to the leg. The patient at first refused amputation which was not done for nine hours after admission. He lost much blood prior to the operation. Recovered slowly. *Case* 23.—The Chester Infirmary: Mr. Weaver. A girl, aged 18. Strumous disease of the tarsus and ankle-joint. Amputation (flap) in the lower third. Recovered slowly. She attended for many months with an unhealthy strumous sore of the stump. *Case* 24.—The Cheltenham General Infirmary: Mr. Eves. A boy, aged 14. The whole charge of a gun had gone through his foot, shattering the tarsal bones and arteries at the ankle. Under treatment. *Case* 25.—The Cheltenham General Infirmary: Mr. Eves. A sickly-looking man, aged 38. Amputation by flap close to the ankle-joint for caries of tarsal bones. Recovery. *Case* 26.—The Gloucester General Infirmary: Mr. Wilton.—A man, aged 22. Disease of the ankle-joint a year and a-half. Amputation (flap) below the knee. Recovery. *Case* 27.—The Gloucester General Infirmary: Mr. Lovegrove.—A feeble, over-worked youth, aged 13. Disease of the ankle for several years. Amputation (flap) at the middle of the leg. Recovery. *Case* 28.—The Hull Infirmary: Dr. Lunn.—A man, aged 45. Severe injury to the leg. Amputation (flap) fourteen hours after. Recovery. *Case* 29.—Addenbrooke's Hospital (Cambridge): Dr. Humphry.—W. G., aged 24, admitted October 14, 1859, with compound comminuted fracture of right foot with laceration of the soft parts. The toes of the left foot were also crushed. (Railway accident.) Amputation (Teale's method) of right leg below knee. The toes of the left foot were also removed at the metatarso-phalangeal joints. On the third day sloughing began in the stump, and also in the left foot. It continued and extended in both limbs. Death from pyæmia on the tenth day. *Case* 30.—The Northampton Infirmary: Mr. Mash.—A pale, strumous man, aged 19, had for nine months suffered from necrosis of the lower end of tibia; this had recently implicated the ankle-joint, which, six weeks after admission, was evidently entirely destroyed. He suffered from cough, puriform expectoration, and well-marked hectic, and the physical signs of consolidation of the apex of each lung, with softening on the left side, were very evident. Circular amputation immediately below the knee was performed on December 18, and followed by marked improvement in his general condition and pulmonary symptoms. He left the Hospital on May 9 with the stump almost healed. *Case* 31.—The Northampton Infirmary: Mr. Mash.—A robust, healthy-looking man, aged 27, who had sustained a compound comminuted fracture of the left leg, with extensive contusion and laceration of the soft parts. Circular amputation was performed at the junction of the upper and middle third of the leg, and was followed by severe traumatic delirium, which subsided in a few days under large opiates. Subsequently, an attack of erysipelas, followed by deep subfascial abscess, occurred, which, however, speedily got well. He then improved rapidly, and was discharged two months after admission with the stump all but healed. *Case* 32.—The Northampton Infirmary: Mr. Mash.—A man, aged 45, in excellent health, but had been for more than twelve months the subject of severe neuralgia of the stump left after secondary amputation at the lower third of the left leg for the result of an injury to the foot, etc., caused by a railway accident. After a long course of unsuccessful treatment, a second amputation was performed by circular incision below the knee, and he rapidly recovered, being discharged in three weeks with the stump soundly healed. The cicatrix of the original stump was firmly adherent to the extremity of the tibia, and the truncated extremity of the posterior tibial nerve was involved in the cicatrix, slightly bulbous, but in no degree morbidly enlarged. *Case* 33.—The Northampton Infirmary: Mr. Terry. A highly-strumous boy, aged 14, admitted May 7, had for several months suffered from strumous disease of the left ankle-joint, which gradually terminated in suppuration. Amputation by circular incision was performed in the lower third of leg ten weeks after admission; sloughing of the flaps occurred to a considerable extent, and a very tardy healing was the result. He was discharged three months after the operation with a small and healthy sore, but long afterwards this was known to be unhealed. *Case* 34.—The Northampton Infirmary: Mr. Terry.—A lad, aged 16, was admitted for gunshot wound of the foot, a gun charged with common shot having gone off accidentally while pointed toward the thin floor of an upper room, on which he was standing. The whole foot, including the ankle-joint, was more or less disorganised, the integuments both on the dorsal and plantar aspects being extensively destroyed, and the bones and muscles shattered. Circular amputation was performed in the lower third of the leg. The wound healed slowly by granulation, and he was discharged cured on August 7. *Case* 35.—The Northampton Infirmary: Mr. Ashdown.—A brewer's labourer, aged 32, whose constitution appeared to be rather the worse for India, syphilis, and his ordinary avocation, was admitted on October 11, a brewer's dray having passed over his left leg and inflicted such injury on the bones, vessels, and soft parts as to render immediate amputation imperative. This was performed under chloroform by the ordinary flap operation below the knee; considerable sloughing of the integument of the lower flap occurred with urgent vomiting and grave constitutional symptoms, and on the ninth day a rather free secondary hæmorrhage occurred; he subsequently, however, recovered, and was discharged in good health four months after admission, with a sore of some size still unhealed.

FATAL CASES.

Case 36.—J. S., aged 57, admitted August 2, with severe compound comminuted fracture of both legs, caused by his being run over by a waggon. One limb was entirely disorganised, and was removed twenty-four hours after admission. He died of shock on the third day. *Case* 37.—

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A man, aged fifty. Amputation through the upper third of the leg for compound fracture. Death a few hours after, from shock. *Case* 38.—A man, aged 42. Amputation just below the knee for severe smash of the leg. He died on the third day. *Case* 39.—A man, aged 24. Severe crush of the foot and leg in a railway accident. Fourteen hours afterwards, and after travelling thirty miles by railway, he was brought to the Hospital. Amputation (double flap). The anterior flap sloughed extensively. He died with symptoms of pyæmia on the eighth day. *Case* 40.—A man, aged 34. Extensive injury to the left leg. Compound fracture of the right leg. The left leg was amputated in the upper third. Death from pyæmia. *Case* 41.—A man, aged 50. Admitted May 29, 1860. General health previously good. About eight weeks previous to admission his foot was crushed by the wheel of a waggon passing over it. On examining the foot the toes were in a gangrenous state, the integument about the foot sloughing, and bones of the ankle-joint in a carious state. Amputation of the leg was performed about eight inches below the knee by a long posterior flap. He progressed favourably for the first three or four days after the operation, when unfavourable symptoms set in; his appetite became impaired, great pain about his abdomen, etc., and died from exhaustion on July 1, 1860. Nothing unusual was observed at the autopsy.

AMPUTATIONS OF THE FOOT.

Case 1.—The Leicester Infirmary: Mr. Benfield.—A strumous-looking man, aged 30, always unhealthy. The subject of spinal curvature. Syme's operation. He progressed slowly; sinuses formed in the flap; at last note healing well. *Case* 2.—Addenbrooke's Hospital (Cambridge).—A man, aged 54. Left foot crushed in a thrashing machine. Hey's operation. Recovery. *Case* 3.—The Sussex County Hospital: Mr. Blaker.—A girl, aged 15. Extensive scrofulous disease of nearly all the bones of the foot, of two years' duration. Syme's operation. On removing the malleoli the ends of the tibia and fibula were found diseased. A quantity of the softened interior of the bones was gouged out. Recovery. When she left the Hospital she could bear to stand on the heel without pain. *Case* 4.—The Chester Infirmary: Mr. Weaver.—A man, aged 21. Seven months before had severe injury to the left foot from a railway accident, for which amputation through the tarsus was performed. Much of the lacerated integument subsequently sloughed, and as the resulting stump was manifestly necrosed, Syme's operation was performed. Very serviceable limb. This case was complicated by a fracture of the skull and laceration of the brain. *Case* 5.—The Leicester Infirmary: Mr. Paget.—A man, aged 26. Caries of the astragalus and os calcis; ankle joint free. Duration three years. Syme's operation. Convalescence retarded by sinuses opening in the flap. No exfoliation of bone. Recovery. *Case* 6.—The Sussex County Hospital: Mr. Blaker.—A strumous woman, aged 19. Caries of tarsal and metatarsal bones, of many months' duration. Pirogoff's amputation. At the last note (27 days after the operation) the stump had nearly healed. *Case* 7.—The Derby Hospital: Mr. Fearn.—Strumous disease of the ankle joint of several years' standing. Syme's operation. Recovery. *Case* 8.—The Derby Hospital: Mr. Fearn.—A man, aged 21. Amputation in front of the scaphoid bones. Recovery. *Case* 9.—The Leicester Infirmary: Mr. Macaulay.—A woman, aged 21. Disease of the os calcis, astragalus, and metatarsus. Ankle-joint quite sound. Syme's operation. A small portion of the anterior flap sloughed, leaving an opening in it. This closed up, and she then progressed favourably. Recovery. *Case* 10.—The Cumberland Hospital: Mr. Page.—A man, aged 20. Extensive disease of the tarsus, of three years' duration. Syme's operation on September5, 1860. He recovered well. He was seen in February, 1861. He then walked without difficulty or inconvenience. *Case* 11.—The Liverpool Royal Infirmary: Mr. Bickersteth.—Strumous disease of the foot. Syme's operation. Recovery.

Fatal Cases.

Case 12.—A man, aged 29. The three smaller toes and the side of the foot were crushed by a railway carriage. On the seventh day tetanus set in, and on the ninth day he died. *Case* 13.—A thin, delicate woman, aged 44, but looking much older. Strumous disease of the right ankle-joint. Syme's operation. Death.

THE LONDON HOSPITAL.

POPLITEAL ANEURISM IN AN OLD MAN WITH DISEASED ARTERIES—CURE BY COMPRESSION.

(Under the care of Mr. ADAMS.)

In the following case the advantages of the modern mode of treatment were especially felt, inasmuch as the patient was a very unsuitable subject for the ligature of a large vessel. The aneurism involved the popliteal artery, but the trunk of the femoral itself, at the part where the ligature would under the old method of treatment have been applied, was dilated. In young subjects with healthy arteries the operation of ligature of the femoral is one which is generally successful, but the case is altogether altered when we have to deal with an old and debilitated patient, and especially with one in whom there is evidence of general arterial disease. It is in those of the latter class that the Surgeon feels especially grateful for a knowledge of a method which promises a cure without having to encounter the risk which would attend the application of a ligature.

William G., aged 67, a storekeeper, applied in the out-patients' room in the early part of December last. He was a tall, thin man, of florid complexion. He stated that he had always enjoyed good health. About ten days before coming to the Hospital he had suddenly, while walking, felt a severe pain behind his left knee. The pain was followed by numbness, which extended down the leg, and he soon afterwards discovered that there was a beating tumour. After this he remained in bed, and had fomentations applied. On examination of the part a large prominent aneurism was discovered, filling the popliteal space, beating very forcibly, and rendering the skin over it very tense. The coats of the aneurism appeared to be very thin, and it was, in fact, all but diffused. Pressure on the trunk of the femoral easily controlled the pulsation, and caused the tumour to collapse. The man was admitted as an in-patient under Mr. Adams' care on the day of his application.

Compression treatment was commenced on December 28, and continued, somewhat irregularly, until March 11 (seventy-five days). Various instruments were used:—Signorini's tourniquet, Carte's apparatus, and weights suspended from a cradle over the bed. The man was very restless, and objections were found to attach to whatever mode of compression was employed. During the first few weeks but little progress was made, and as the aneurismal sac was very tense, and fears as to its giving way were consequently entertained, the propriety of resorting to operation was on several occasions discussed. Mr. Adams was, however, very unwilling to apply a ligature, as the femoral artery was evidently diseased in the greater part of its course, and in the upper part was considerably dilated. It was determined, therefore, still to persevere with the compression plan. From January 22 to January 31 all compression was disused, the man being ill with a severe attack of bronchitis. At the latter date the tumour appeared to be almost of its original size. The tourniquet was then reapplied, and during the next few days solidification proceeded rapidly. On February 11 the tumour was very much smaller and harder, and the pulsation so feeble that, on several occasions, it was a matter of doubt as to whether it could be felt at all. On February 26 the notes state, "The tumour is now the size of a large walnut, hard and firm, and scarcely any pulsation can be felt in it. An arterial trunk running across it pulsates distinctly." On March 26 we find, "The aneurism has not diminished in size since the last note, but is much harder and firmer. Not the slightest pulsation has been felt in it for the last fortnight."

Soon after the last date, this man was allowed to leave his bed. He was discharged from the Hospital on April 19, nearly four months after his admission. At the time of his discharge he was in excellent health, and the tumour was not larger than a walnut, and perfectly solid.

We have condensed the above narrative from the detailed notes of Mr. D. H. Dyte, the dresser of the patient.

Cases of compression treatment of aneurism may be divided into two groups; in the first place, those in which the compression was maintained continuously, or nearly so; and the second, those in which it could only be borne at intervals. The present case belongs to the latter class. In these, of course, the treatment generally occupies a much longer time, yet this apparent drawback is often more than compensated

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for by the fact that those who cannot bear uninterrupted compression treatment are of a constitution rendering them bad subjects for an operation. Nothing could have been less promising as to cure than the man's progress during the first fortnight, and few patients could have put more difficulties in the way. Yet, by persevering with such treatment as the man could be got to bear, the case was at length conducted to a successful result.

CHANCRE ON THE LOWER LIP—CONSTITUTIONAL SYMPTOMS.

(Under the care of Mr. ADAMS.)

We published last week two cases of primary venereal sores, occurring on the face, one on the lip, and one on the eyelid. The following presents us with another instance of erratic chancre:—A B., a buxom servant girl, aged 23, was sent to the Hospital on account of an indurated ulcer in the middle of the lower lip, which she had been told was a cancer, and had been advised to have excised. The base of the ulcer was exceedingly hard; but the entire absence of warty growth, the patient's age, sex, and state of heath, militated strongly against the idea of malignancy. Mr. Adams at once recognised a remarkable resemblance to an ordinary indurated chancre, and the presence of enlarged and hard glands under the jaw confirmed this suspicion. The girl stated that the sore had existed about six weeks, and of its cause she knew nothing. She thought she had had a slight crack there for some time. During the week following her admission ulcers formed in both tonsils, and a slight rash came out on the face and neck. The rash was ill-developed, but resembled syphilitic psoriasis. The girl was put on mercurial treatment, and the induration in the base of the sore has wholly disappeared. The ulcers in the tonsils, which were kidney-shaped and symmetrical, have not quite healed.

GUY'S HOSPITAL.

NECROSIS OF THE ENTIRE SHAFT OF THE CLAVICLE.

(Under the care of Mr. HILTON.)

A healthy-looking man, aged about 22, was admitted under Mr. Hilton's care, for necrosis of the left clavicle. The greater part of the shaft of the bone was necrosed, and projected out of a large opening midway on the anterior surface of the bone. Mr. Hilton enlarged the wound, and drew out the diseased bone, a large piece, corresponding to the entire shaft. There was a case of new bone forming.

Mr. Hilton stated that the amount of dead bone removed in this case was very unusual. There was no evident cause for the necrosis, at least, no constitutional tendency to struma, etc. The man attributed it to a blow. Mr. Hilton believed that the patient would regain a good clavicle. As he was full grown, there was not the difficulty there was in younger subjects in the clavicle becoming shorter from interference with the development of the bone.

THE LEEDS FEVER HOSPITAL.

TYPHOID FEVER — AFTER A FORTNIGHT'S INTERVAL A SECOND ATTACK OF TYPHOID FEVER, WITH DISTINCT ROSE RASH.

(Under the care of Dr. HARDWICK.)

[Reported by Mr. F. HALL, Resident Medical Officer.]

Samuel S., aged 18, a mechanic, residing in Leeds, was admitted on December 11, 1860. The fever commenced on December 2, with rigors, headache, etc. When admitted, his tongue was white; skin hot, but rather moist; pulse quick and regular; no diarrhœa. There was a well-marked and rather abundant rose rash on the abdomen. He was very restless at night, but not delirious. He was ordered to take an ounce of liquor ammoniæ acetatis every four hours; and eight grains of Dover's powder every night. The medicine caused profuse sweating, and the case progressed favourably afterwards.

On December 20 his tongue was dry, and rather brown; stools were thin and pale, but not frequent.

28th.—Decidedly improving.

January 9.—He was removed to the Convalescent Ward, where there were three or four other patients who had recovered from typhoid fever.

On January 19 he complained of headache, lassitude, and chills; his tongue was furred and white; pulse quick; skin hot; bowels regular. He was ordered to take a saline draught every four hours, and was placed on low diet.

22nd.—The bowels were opened three times in the night; stools thin, and of a light yellow colour; skin moist; tongue covered with a thick white fur; pulse 108. There was a well marked rose rash on the abdomen. There was delirium and slight restlessness at night. He was ordered to take six grains of Dover's powder every night.

24th.—Bowels regular, stools solid, but the iliac tenderness was still present. Tongue white in front, dry, and rather brown behind. Fresh rose spots on the abdomen; the old ones were fading. He slept well. To omit the Dover's powder.

26th.—He has passed good nights. Bowels only moved once a-day. Tongue red at tip, and edges slightly glazed, being covered with a white fur in the centre. Pulse regular. Skin moist.

31st.—Progressing favourably. Tongue slightly furred; pulse natural; bowels regular; no fresh rash has come out.

February 4.—Rose spots still visible. He is now convalescent. Ordered a mutton chop.

9th.—The rash had disappeared. He slowly regained his strength, and was discharged cured on March 1.

TYPHOID FEVER — SUDDEN COLLAPSE AND DEATH—AUTOPSY—NO PERFORATION—BLOOD THIN AND WATERY, AND OF A DIRTY BROWN COLOUR.

(Under the care of Dr. HARDWICK.)

[Reported by Mr. HALL.]

Eliza T., aged 12, residing in York-street, Leeds, was admitted on January 19, 1861. She began to be ill, with shivering and the usual febrile symptoms, five days before admission. Two days ago her bowels were much purged; stools thin and yellow.

January 19.—Skin hot and dry; lips parched; tongue covered with a thick white fur; pulse 112; her skin was of a dusky brown colour; no rash was found. Ordered half-an-ounce of saline mixture every four hours.

20th.—She had rested well in the night; bowels not moved. She was ordered to take a quarter-of-a-grain of tartar emetic, and warm water afterwards, to assist the vomiting.

22nd.—Tongue moist and white; abdomen a little more tumid; diarrhœa present. She seemed to be going on favourably.

24th.—At 8 a.m. she suddenly became collapsed; pulse very weak, scarcely perceptible; face livid; skin blue and cold; respiration unaffected; heart and lungs appeared healthy on a stethoscopic examination. The abdomen was neither more tympanitic nor more tender than before. Ordered wine negus, to be taken freely, and half-a-grain of opium every four hours. She had been purged once in the night previously, but in other respects she was doing very well till the urgent symptoms set in. It had even appeared a milder case than usual. She never rallied, but continued to sink gradually, till 3·30 the following morning, when she died. She was conscious to the last.

Autopsy.—On the surface of the left lung, both at the apex and the base, ecchymoses of a dirty brown colour were seen. The heart was healthy, containing very small clots on each side. In the lower end of the ileum, and in the ascending colon the characteristic typhoid ulcers were found. The mesenteric glands were large, and some of them were commencing to suppurate in the centre. There was no peritonitis. The spleen was solid, and distinctly lardaceous. The other viscera were healthy. The blood throughout the body was thin, watery, and of a dirty brown colour, so marked that all the viscera had taken on, more or less, this colour. It was particularly well seen in the ecchymosed patches, and in the section of the lardaceous spleen. By an unfortunate mistake none of the blood was reserved for microscopic examination.

This case was particularly interesting, because it simulated those instances of collapse and death from perforation of the ileum, where there are no decided local symptoms to indicate

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the lesion. So close was the resemblance, that an opinion was expressed that the post-mortem would most probably disclose this condition. The lividity and blueness of the skin pointed to the chest, but on careful examination during life no evidence of anything abnormal could be found.

Medical Times and Gazette.

SATURDAY, MAY 11.

HOSPITAL STATISTICS.

Bos locutus. St. Bartholomew's Hospital has issued a Statistical Report for the Year 1860. It is with the most sincere pleasure that we hail this contribution to Medical knowledge, coming as it does stamped with the *imprimatur* of the largest and richest institution of its kind in London. The Editor, Dr. Edwards, both by previous University standing and by his recent affiliation to the establishment, is the very man to whom such a task should be entrusted. A Physician who adds to his name "M.D. Cantab.," combines both requisites for sagacious interpretation of Medical facts by the most approved methods of modern numerical science. All who have at heart the advancement of our Profession will look forward with interest to the second and fuller instalment promised in the preface.

Internal evidence leads to the belief that this report is proximately connected with the labours of Miss Nightingale. For the Treasurer commences some introductory remarks by a candid statement that "in the year 1859 when application was made to me, as Treasurer, for statistical information regarding the patients received into St. Bartholomew's Hospital, I very much regretted my inability to comply with the request to the extent required, from want of sufficient data. After much careful consideration of the matter I saw how extremely important it was that this Hospital should be in a condition to furnish not only to the Governors, but to the Medical Profession and society at large, the important facts of vital statistics, which such an institutiou can alone afford." It is at once evidence of that lady's influence for the furtherance of a good end, and creditable to the managing body of this ancient foundation that seeing and admitting the want, they applied themselves energetically to prevent its recurrence. The substance of the report takes a form closely resembling that originally circulated, previous to the adoption of some recent emendations. Indeed Dr. Edwards commences his table with a statement that "the plan followed out is *mainly, though not entirely*, that suggested by the Sanitary Section of the Statistical Congress. In dealing with these materials, much tact and judgment have been displayed. Five tables give us consecutively—the patients in Hospital on January 1—those admitted,—those "cured and relieved,"—those "discharged otherwise than cured and relieved,"—and the deaths during 1860. A sixth table collects the whole number of cases under treatment, with the results, into one page of type. In handling the nosology a like prudent style of selection is adopted; for, while the Editor follows in the main the list as furnished him, he makes some desirable changes, and omits entirely the imaginative headings which, in the original documents, started by linking together, among other diseases, quinsy, stricture, purpura, rickets, bronchocele, and worms, in the fairy bond of "Zymosis." Those mysterious affections of the human race, "Necusia" and "Necrencephalus," with others which formerly figured in similar returns, have on this occasion vanished; or, at least, sunk undiagnosed into the limbo of "Diseases not Classed." The latter heading comprises 175 cases; for three of these, in the death table, an explanation is offered by way of note, stating that they were admitted moribund, and post-mortem examination was refused. But it is an evidence of the authentic character of the return, that no attempt is made to conceal the remaining discrepancy, one proportionally very small, and absolutely irremediable in such classifications.

An eighth table gives an interesting summary of operations during the year. The total of these is 339, with only 41 deaths; a per-centage very singularly favourable, but slightly diminished in a note, where, although *paracentesis capitis* thrice performed in one patient, figures properly as one fatal case, lithotrity, 26 times performed on 13 patients, of whom 2 died, figures as 26 separate cases.

It is not, however, our present object to enter minutely into an examination of the Report, or to criticise once more the nosological arrangement on which it is founded. In its compilation, Dr. Edwards has, doubtless, preferred the prospect of uniformity to systematic completeness. We would rather congratulate the Profession at large on an addition to the number of reliable facts as to the working of our London Hospitals; facts for the scarcity of which we not long ago expressed regret. It is here before us that 5724 patients were admitted during the past year, a number which added to those remaining from that immediately preceding, rises to the large total of 6245. The present Report being limited to the subjects of age and sex, gives no details of duration of illness before admission, a point of some value in such inquiries; nor does it attempt to collect in the course of the respective tables, the totals of those larger Medical generalisations, such as nervous, circulatory, and respiratory disease, which give to our conceptions system and completeness, and which, if they add no absolutely new facts to science, at least assist the mind in grasping and realising its details. The severity, however, of a large proportion of the cases is attested by the high rate of mortality. Taking this at the most favourable standard for Surgical and Medical disease combined, it amounts to 10 per cent. of the admissions and those remaining from a previous year. The last sentence of the Treasurer's Preface detracts from the force of this ratio, when he desires "to direct the attention of the Governors to the fact, that, whereas the mortality in the Hospital during the year was 623, no less than 82 of this number died within 24 hours of their admission." It can hardly be supposed that a person of his experience falls into the error which has been committed by many others, and from which the views of the Sanitary Congress did not seem to be entirely free; namely, of looking at a high death-rate in an Hospital, when not caused by Hospital fever, malaria, gangrene, or some definite esoteric cause, as an evidence of its inefficiency; but it cannot be too often repeated that such is not the fact. Such institutions herein differ essentially from districts, that a high death-rate, except under the particular circumstances named above, is absolutely a merit rather than a defect. It shows a greater afflux of severe cases, and a greater demand on the Hospital accommodation as existing in the neighbourhood. It has already been argued at some length in this Journal, that the operation of such charities is not unlike that of drainage, and that the quantity of acute, dangerous, or moribund disease is in direct relation to the extent and populousness of the surrounding district. A corroboration of this view is, indeed, furnished by the fact brought forward in the Treasurer's words. It enables us to form an estimate of the great proportion of cases, where immediate proximity to the scene of the mishap, whether illness or accident, is itself the strongest recommendation an Hospital can have; it offers valid testimony to the system adopted in some foreign capitals by which these establishments are scattered with more or less regularity and method over the area of inhabited ground, and goes far to

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sanction the introduction of a similar plan in London whenever opportunity may occur.

There is one other reflection which will have suggested itself to those who have gone carefully through the tables to which we have alluded; namely, the large amount of work and responsibility thrown of necessity on the Medical staff of this Hospital. Here we have verified, step by step, the first sentence of the programme issued each year by the authorities. The Hospital does actually "receive within its walls upwards of 6000 in-patients annually;" and we can entertain the less doubt of the correctness of the statement immediately following, that "its out-patients and casualties amount to more than 95,000 annually." Now, as the staff, extracted from the same record, numbers just 17, exclusive of those resident in the building, it follows that every Medical officer is, on an average, responsible for above 367 in-patients and more than 5588 out-patients and casualties. Even if we could suppose these evenly distributed among the individual members, such a state of things would need very little comment; but if the usual distribution between Physicians or Surgeons and their assistants prevails here as elsewhere, it is evident that the former must have whole regiments of in-patients, and the latter never-ending files of out-patients—waiting many a weary hour for their infinitesimal share of attention from an officer more wearied and exhausted than themselves.

Dr. Edwards's essay in the statistical method admits several solutions of this one problem: either much work is delegated to House-Surgeons and Students, or the Medical staff of the Hospital is overtasked, or, lastly, it may be feared that the patients of even this noble institution are liable sometimes to experience treatment which we will, without offence, follow a Greek writer in designating as "Autoschediastic."

THE WEEK.

Dr. Beale's Fourth Lecture at the College of Physicians was occupied in tracing changes connected with the growth of "germinal matter," and its conversion into "formed material," as exemplified in the cuticle. As germinal is converted into formed matter, so it becomes by degrees surrounded by a matter which separates it from the sources of nourishment; it ceases to grow, then dies, and undergoes fatty degeneration. The great preponderance of germinal matter in the tongue of a fœtus of 7 months over that of a child of 10 years, is analogous to its preponderance in the newer and deeper, as compared with the outer and older layers of cuticle or parts of hair. In the fœtus, scarcely any fibrous tissue can be detected in the corium; in the adult the corium seems to be composed entirely of this substance, the bundles of which are separated by yellow elastic fibres and corpuscles, which are generally known as areolar tissue corpuscles. On the application of a blister, the supply of nutrient material to the skin is largely increased; the germinal matter in the deeper layers of the cuticle increases rapidly, and undergoes subdivision; the formed material is softened and swelled; and small spheroid masses of germinal matter, surrounded with a very thin layer of formed material, are formed, which are recognised as pus corpuscles. Every grade may exist between the normal elementary parts of the cuticle with a very large proportion of formed material, and pus in which this material is nearly absent. He spoke of Virchow's doctrine, that all growth proceeds only from cell growth, as being true as a general proposition, inasmuch as it is the rapid increase of germinal matter out of which new forms are developed. Pus cannot be restricted to any structure, inasmuch as an abundant supply of nutrient materials, and rapid but elective growth of elementary parts, are the conditions necessary for it, and they may be found almost universally. The white blood corpuscle is entirely composed of germinal matter, and under certain conditions, as in clots and renal casts, may be seen to undergo multiplication by fissure, and development into imperfect fibres. In all tissues, even the youngest, the elementary parts can be seen arranged in definite order and quantity; and as growth proceeds, the number of points of germinal matter are seen to be separated by wider intervals of formed material. But when the pre-ordained limits to indefinite growth are disturbed, then tumours and abnormal hypertrophies are the result.

The art of teaching is a special gift, which may or may not be superadded to a sound practical knowledge of the subject to be taught. A man may be a first-rate anatomist, and yet be unable to teach even the rudiments in clear, intelligible language, in due order, and without confusion. It is no doubt owing to the fact that the regularly-appointed Professors in the Medical Schools have not always the logical faculties requisite for good teachers that a system of private tutorship has become not merely popular, but necessary, to men of slow brains and inadequate general education. That system of private tuition has long been carried on by the Messrs. Power with so great success that we have heard it said they have more influence in forming the Professional English mind than all the other London teachers put together. Now we are glad to see that they propose to come forward boldly, and instead of teaching as it were secretly and ingloriously, to establish a kind of Collegiate Preparatory Institution for young men of from 15 to 18, who will work under the advice of competent masters at the various sciences and languages necessary for laying a good theoretical basis in the student's mind. We are glad to see the great and acknowledged ability of the Messrs. Power employed openly and honourably in promoting the general education of the junior members of our Profession on a sound basis.

We shall soon be able to furnish our readers with detailed accounts of the results of the late Census; meanwhile, we may give some specimens, which may serve to show the kind of result which may be expected. For example, in the older parts of towns, where all the ground is already occupied with houses, the population may be expected to be stationary, or decreasing. So, in the older part of St. George's, Hanover-square, comprising the Hanover and Mayfair sub-districts, the ascertained population in 1851 was 33,181, in 1861 it was 32,648, and although part of the decrease may be accidental, owing to the Easter Holidays, yet there has been no increase. In suburban districts the population may be expected to increase, through the addition of new houses built on unoccupied sites; so in Belgravia it has increased from 40,024 to 55,063. The proportion of women to men, is 50 to 37. Towns which possess attractions, real or imaginary, which attract votaries of business, health, or fashion, have increased largely. Thus, Weston-super-Mare has increased since 1801, when it numbered 187 inhabitants, to 9000 in 1861. Places of trade or manufacture, for the most part, have increased. But the serious thing is the indication conveyed by the returns from the Eastern Counties of a widely-spread decrease of the very bone and sinew of our people, the agricultural labourers.

A suit of a peculiar character has just been decided in the Court of Probate, relating to the will of Miss Poole, of Ludlow, who died at the age of 78, on the 10th April last. She had been born deaf and dumb, and had become blind in

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1842. She was possessed of independent property, and having received considerable additions thereto in 1851, she expressed a desire to make a will. Instructions were taken for it by the Rev. Mr. Walcott, and by his sister Mrs. Price, who knew her well, and could converse freely with her. This having been done at two interviews, a memorandum of her wishes was sent to London, where they were reduced to a will, and settled by counsel in the most simple and concise terms. The will was executed on the 12th of November, in the presence of Mr. Walcott, Mrs. Price, Mr. Henry Hodges, her medical attendant; Mr. David Buxton, Principal of the Deaf and Dumb Asylum at Liverpool: the Rev. Mr. Phillips, rector of Ludlow; and Mr. Anderson, ex-Mayor of the borough. The will was interpreted by Mr. Buxton to the testatrix, who repeated it to Mrs. Price, and then Mrs. Price pronounced each sentence aloud, so that the company might see that it agreed with the written will. Finally, the instrument was signed by the testatrix, and it was witnessed by Mr. Buxton and Mrs. Price, the attestation clause containing a minute of the *modus operandi*. After hearing evidence and some attempt at compromise, the jury found that the will was good, and the Court decreed probate.

An inquest was held at Limerick, on Thursday, the 2nd instant, on the body of William Thompson, who died suddenly, after having had a Turkish bath at Dr. Barter's establishment. It appeared that the deceased had for the last two years, but particularly for the last two months, suffered from a pain in his left side and between his shoulders, and that on Tuesday, April 30, immediately after having taken a bath, he was seized with spitting of blood, of which he died. It further appeared that Thompson had dined shortly before taking the bath, and that had the attendant been aware of this circumstance he would have sent him away for some time, as it is contrary to the rules of the establishment to allow of bathing soon after meals. From the evidence before them, the jury found that "the deceased came by his death from natural causes, and that no blame was to be attached to the bath, nor to anyone connected therewith."

In the Court of Queen's Bench in Ireland, application was made on Friday, May 3, by Mr. Willism Smith, acting on behalf of Dr. James Barker, jun., for a mandamus to be directed to Dr. Steele, Registrar of the Branch Medical Council in Ireland under the Medical Act, commanding him to restore the entry in the Local Register for Ireland of the name and qualifications of the said James Barker to its original state, and to insert therein the letters M.D., which letters had been struck out from the Register, as was alleged, without sufficient authority. The affidavit of Mr. Barker stated that on April 27, 1860, he was solemnly examined by the College of Physicians, and that their diploma was duly granted to him as a learned and skilful person. The Local Council in Ireland consisted of six members, Dr. W. E. Steele being the Registrar, and he duly entered the name of Dr. Barker on the Register, with the addition of M.D. A meeting of the Local Council was subsequently held on February 16, in the present year, when, by the casting vote of the chairman, a resolution was carried,—That the Council were of opinion that the claim of the King and Queen's College of Physicians in Ireland to confer upon Licentiates the degree of Doctor of Medicine could not be recognised without a direct violation of the Act of Parliament,—and the Registrar, Dr. Steele, was directed to expunge from the names of the Licentiates the superadded title of M.D., those of thirteen others being thus included with that of the prosecutor. The real object of the motion, therefore, was to ascertain whether a Licentiate of the King and Queen's College is or is not entitled to have attached to his name the distinctive title of M.D., or Doctor of Medicine. The conditional order was granted, to afford an opportunity of having the important questions raised fully discussed.

Vice-Chancellor Wood's decision in the case between the Apothecaries' Society and the College of Physicians instead of settling, has left the real question at issue in quite as unsatisfactory a state as before the commencement of legal proceedings. No doubt it has now been established by that Judge's dictum that the College bye-laws regulating the conditions upon which their Licenses may be issued are valid, and henceforward can be lawfully granted in the terms proposed; but the material point in contest, viz., how far the holders of such documents will be able thereby to supply medicines to patients under their own care, yet remains as distant as ever from a definite settlement. Until that important matter has been decided by some competent tribunal, the College Licentiate must be content to act under the fear of an impending indictment, or an action for penalties, in having infringed the Apothecaries' Act, unless he take the precaution of also clothing himself with the protection which a Licence from the Hall affords in England. Further litigation seems, therefore, inevitable. But suppose the College of Physicians to succeed ultimately, if the Vice-Chancellor's statement be correct "*that a Scottish Physician can act in England as a General Practitioner without the Licence of the Apothecaries' Company*," the gain will be very little to the College, while there will thus be an additional inducement held out to obtain University education. Under such circumstances, we venture to suggest that some compromise might be arranged between the contending parties. The expediency of the measures heretofore proposed have not received the unanimous approval of the Profession, and the litigious spirit exhibited on both sides has not tended to restore harmony; therefore, it becomes the more desirable that all differences should be amicably settled. We throw out the suggestion for consideration. Suppose the College were henceforward to issue Licences only to gentlemen who had previously received the Society's diploma, and the Hall in future always grant their License to the College Licentiates reciprocally. In this way all holders of such documents would feel themselves elevated from the status of being considered "only an Apothecary;" while the complaint of existing Licentiates, that their Professional position becomes lowered from being authorised to practise Medicine by a Trading Association, must be effectually silenced. Were some such, or any analogous arrangement effected, further litigation might be obviated, and peace restored to both branches of the Profession in England, which must assuredly be thought a most desirable consummation.

Dr. Edward Pick, whose Lectures on Memory have met with great success at the Oxford University, at the International Statistical Congress, and at a great number of Literary Institutions and Schools, delivered on Monday last an Introductory Lecture on his New and Natural System of Improving the Memory, at Guy's Hospital. The large theatre was crowded with Students and Officers of the Hospital, and the lecturer was very warmly received. He said that some influential friends of the Hospital had invited him to give the Students an opportunity of acquiring his system of improving the memory. The artificial means proposed hitherto to facilitate learning by heart had failed, because they were based on a false understanding of the mental faculties, and especially of that of memory. The basis of remembrance is the association of ideas; but the association of ideas is generally not

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understood. Association of ideas is called the arbitrary union of ideas in a phrase or in a picture; whereas the true association of ideas is a process going on in the mind without our co-operation. Two ideas present in the mind repel each other, or blend together. If they blend, this blending is the association of ideas. This blending is strong or weak, according to the strength of the ideas, and to the degree of their affinity. This blending is the basis of recollection, and a striking proof that these blendings are not performed by us is that we are not able to forget things which we would like to forget. We remember them because they came with a great strength to the mind, and blended strongly with other ideas. Our space does not permit us to enter more deeply into this theory, which the Professor said was the basis of his system. He then gave some instances of the results which are obtained with his system, in repeating by heart a series of eighty-four figures backwards and forwards, and in making his audience repeat a series of fifty or sixty isolated words after a single hearing. The Professor then showed how those principles can be applied to facilitate the study of languages, and announced that he will form classes at the Hospital for his system, and for its application to the study of languages. The audience appeared highly interested in the subject.

We have before referred to the case of Mr. Muncherjee Beramjee Colah, a Parsee by birth, a Member of the Royal College of Surgeons of England, and a British subject, who had been denied the privilege of competing for a Medical appointment in the Indian Army, because he is a native of India. He makes the following statement:—

"The Parsees of the present day live in all parts of the world. A few are in Australia, a large number in China, many now in England, and within the last year two of them have established themselves in New York. For the last fifty years or more the Parsees have borne the severe cold winters of Canton and Shanghai without the least inconvenience to their health or risk to their life. Within the last six years they have established themselves in London, and later still in Liverpool and Manchester, and are at this day here in sufficient numbers (about forty-five, including children of all ages) to enable a fair inference to be drawn. It is an unquestionable fact that they have borne several winters, and the last a most severe one, with perfect impunity. I am, moreover, enabled to say that they follow their different occupations with an increased amount of mental and bodily labour, and yet enjoy better health and strength than they did in India. In my own case, I beg to state that during the past severe winter I have, with ordinary warm clothing, been called out at all hours, during the night as well as day, to attend to Medical duties, without experiencing any bad effects whatever. On the contrary, though working mentally for a longer time during the twenty-four hours than I used to do in India, I have actually improved in health since I arrived in this country."

Lord Herbert adheres to his previous decision, in consequence of his belief in "the constitutional unfitness of the native and mixed races of India and other tropical countries to sustain for any length of time the climate of our northern regions." We confess that we regret this decision on general grounds, and more particularly in the interest of ethnology. Surely it would be equitable to try one Parsee, and so test the fitness of his race for enduring a northern climate.

CHLOROFORM IN POISONING BY STRYCHNIA.—Dr. M. Schuppert, of New Orleans, (in the *Medical Times* of that city,) publishes a case of the successful use of chloroform by inhalation, in poisoning by strychnia. The patient, a Medical man, had accidentally swallowed about a grain of strychnia. The spasms, which are described as fearful, were readily subdued by the chloroform, but it was found necessary to keep the patient constantly under its influence for many hours. About six ounces of chloroform were used in less than six hours.

REVIEWS.

A Practical Treatise on Diseases of the Skin in Children. From the French of CAILLAULT. With Notes by ROBERT HOWARTH BLAKE, M.R.C.S. 8vo. Pp. 277. London: 1861.

WHOEVER translates accurately a good foreign book does a charitable work; for he not only promotes the more general diffusion of learning, but the book is sure to come into our hands in a much more enticing and readable form, and in a shape so much more convenient for reference. We are not alluding to the greater facility with which all persons read a book in their vernacular, but to the mere getting up of the volume. There is a sort of "please-cut-me-and-read-me" look about a neatly-bound book well printed on good paper which we Britishers like to see, and are willing to pay for, while we feel repelled by the plethoric pamphlet-like masses of stitched blotting-paper from the other side of the water. And the Profession may thank Mr. Blake on this and every other ground for the translation of M. Caillault's Treatise. The book deserves to be known in this country more extensively than it is; we have no doubt that as it becomes known, it will become appreciated. The work of M. Caillault professes to be "purely clinical;" it lays no claim to erudition, but while the reader will find that the author plainly and honestly avows his own opinions, he gives every credit to former and contemporary labourers in the same field, and, even sometimes where he agrees with them, does not hesitate to adopt their phraseology by quotation from their printed works. Readers in this country, too, will feel more at home with M. Caillault, inasmuch as he shows his familiarity with the writings of dermatologists of the English school.

We may mention *in limine* that the exanthematous diseases are excluded, as more properly belonging to the class of eruptive fevers. As respects the other diseases of the skin, the classification which the author makes is not founded on anatomico-pathological considerations, but on grounds of convenience and practical utility. His principal divisions are the following:—1. Syphilis. 2. Strophulous diseases. 3. Lymphatic diseases. 4. Scrofulous diseases. 5. Dartrous diseases. 6. Parasitical diseases. 7. Hæmorrhagic diseases. 8. Cachectic diseases. 9. Inflammatory diseases. On inspecting the table of diseases included in this classification, it will be seen that several cutaneous affections recur in it. "This apparent confusion expresses," the author believes, "a clinical truth." The best parts of the book are where the author treats of syphilis, molluscoid acne, and the cachectic class of diseases.

M. Caillault believes that congenital syphilis constitutes the whole disease in infants, and moreover that congenital syphilis is "altogether cutaneous. It is exclusively confined to the skin; and if it be true that it kills a large number of children, it is owing to the frightful rapidity with which they fall into the cachexia called syphilitic, which is so rapidly fatal."—P. 10. But more than this, M. Caillault maintains that there is only one form of true congenital syphilitic disease, and that is what he calls the "mucous patch" described by other authors as "mucous tubercle," "syphilitic tubercle," "humid papular syphilide," etc. The syphilitic coryza commonly regarded as the first symptom of congenital syphilis, he refers to this form of malady, considering that it is due to the presence of mucous patches inaccessible to sight in the nasal fossæ. Of this, however, he gives no proof. The notion has certainly the advantage of simplicity, but as respects the coryza he appears to rely upon analogy with symptomatic otorrhœa where the mucous patches in the external auditory canal may be readily perceived. Although unable to furnish absolute proof of it, he feels compelled to admit the contagious nature of the mucous patch.

And then as to the numerous cutaneous lesions met with in infants and commonly ascribed to syphilis, M. Caillault has a great deal to say. The mode in which he disposes of them is to regard them as the result of cachexia. Ulcerous lesions, he says, "seem to be the sad privilege of infantile cachexia," and when shrivelled, pale children with asthenic ulcers, round in shape and with perpendicular edges, especially if they are situated near the genital organs present themselves, it is a common thing to regard the disease as syphilitic. "We have a conviction, which we believe to be well

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founded, and which we wish we could make others share with us, that this concurrence of symptoms may exist without the least venereal taint. This, as we have already stated, is the main point of the question: Cachexias, whatever be their nature, chiefly attack the skin and mucous membrane, and with greater energy and variety than congenital syphilis."—P. 23. Then too the appearance of "decrepitude" in new-born children, so much relied upon by many authors as evidence of syphilis, is regarded by our author as by no means characteristic of that disease. Misery, want, and various other diseases than syphilis may induce a cachexia of which the decrepitude may be an expression, and the only connexion it has with syphilis is this, that "among the cachexias which the new-born child may bring into the world, the syphilitic is certainly the most common."—P. 188.

Indeed, "contrary to the opinions of many authors, M. Caillault holds, "that hereditary syphilis is rare, and that many syphilitic parents generate children not merely free from any syphilitic taint, but perfectly healthy and vigorous." —P. 40.

The section on Molluscoid Acne, which the author places among the lymphatic diseases, is very interesting. He points out that the tuberculous tumours present, as their chief and truly pathognomonic character, an orifice more or less widely open, either at the apex or on one side, from which a milky liquid or sebaceous matter may be pressed out. "The seat of this affection is evidently in the cutaneous follicles. It would not be correct to say that it is constituted by the inflammation of these follicles, for this plays but a secondary part in its production. The follicles, in fact, under the influence of unknown causes, grow slowly, forming by this unusual development, the tumours we have just described, and it is only occasionally that a slight inflammation takes place to favour one of the modes of cure."—P. 72. He believes in the possible contagion of the disease, and relates cases bearing upon this question.

The "Cachectic Cutaneous Diseases" are, "cachectic pemphigus," "rupia," "cachectic ecythema," "phagedenic gangrene," and "cachectic diphtheria;" and in describing these diseases, and supporting his own views of their origin, he has repeatedly to discuss their supposed relation to congenital syphilis. Pemphigus, for example, he regards as the result of a cachexia; and although it may be the syphilitic cachexia, it may be one arising from other acute hygienic conditions. And so, too, with phagedenic gangrene, which he regards as the same disease, whether occurring in the cheeks, mouth, or larynx, or on the vulva, or elsewhere on the cutaneous surface. He writes, "It is from our observations of these alterations in special hygienic conditions that we have doubts as to the syphilitic nature of these frequently fatal lesions. We have always in such cases endeavoured to discover the existence of any syphilitic phenomena in the parents. Our inquiries have only yielded negative results. What has contributed not a little to the assumption of a syphilitic origin of these alterations of the superficial portion of the dermis is, that one of the best remedies for their cure is the bichloride of mercury in baths or in lotions—a curative action which this agent possesses in a great number of cutaneous affections."—Pp. 199, 200.

When M. Caillault speaks of Diphtheria, he does not mean the serious, deadly disease which popularly passes under that name. "In the cases to which we allude, diphtheria is, on the contrary, reduced to its simplest element—the anatomico-pathological lesion, that is to say, the pseudo-membrane."—P. 223. He says then, "Cutaneous diphtheria is sufficiently common, but to us it mostly appeared as an ultimate phenomenon to which we have alluded, and to which we would call the attention of observers, being thoroughly convinced that there exists much confusion on this subject, which a severe nosological study will remove The pseudo-membranes which line the auditory canals, the vulva, the circumference of the ears, the conjunctiva, etc. must, in our view, be specially classed in the category of ultimate cachectic diphtheria. Practitioners sometimes consider them as more serious cases of diphtheria; but this is, in our opinion, a *petitio principii*, for it is not diphtheria, as a general disease, which supervenes in these affections, but on the contrary, an ultimate diphtheritic lesion, superadded to an adynamic or other serious general condition."—P. 229.

The most meagre portion of the book is that which relates to the therapeutics of these affections. M. Caillault, like a sensible man, however, places apparently unlimited faith in the hygienic class of remedies,—possibly his "faith in physic" is none of the strongest. Still, his readers would like to know more than he tells them upon this branch of the subject. Probably, should this work pass on, as we hope it may, to a second edition, Mr. Blake will see the desirableness, in the extended annotations which he promises us, of bringing the work up to the demands of English readers in this department. We are altogether pleased with the mode in which Mr. Blake has accomplished his part of the task.

FOREIGN CORRESPONDENCE.

PRUSSIA.

Obersalzbrunn, April 20.

The springs of this place have been used for the cure of diseases from the commencement of this century, and are still much visited, although fashion has emigrated to Reinerz, Ems, Wiesbaden, Baden-Baden, etc. Some of the watering-places in Germany, where often upwards of 25,000 visitors assemble during the season, are, in reality, rather places of amusement and relaxation from the anxieties and annoyances of town-life, while they possess all its comforts and luxuries, than real health-resorts. Amongst those places which are visited by persons who are really ill, and who seek relief from the springs of the place, Obersalzbrum holds a prominent position; the number of patients who come here annually scarcely ever falls short of three thousand, most of whom are affected with catarrhs of the respiratory organs, or suffer from chronic affections of the urogenital system and the intestines.

The therapeutical means of this place are two springs for drinking and two for bathing, and whey. Of the two springs used for drinking, the principal one contains in sixteen ounces of water—

Carbonate of soda	8·81
Sulphate of soda	3·98
Chloride of sodium	1·12
Carbonate of lime	2·02
Carbonate of magnesia	1·00
Carbonate of iron	0·07
Silica	0·26
Carbonic acid	37·50 cubic inches.

This is the result of the latest chemical analysis made by Professor Fischer, of Breslau. According to an analysis made previously to this by M. Struve, it also contains small quantities of sulphate of potash, carbonate of lithia, carbonate of strontia, and phosphate of alumina; these ingredients have been found neither by Professor Fischer nor by Dr. Valentiner who subsequently searched for them; but the time is passed when infinitesimal quantities of rare elements found in springs were thought of therapeutical importance. The most efficient parts of the springs of Obersalzbrunn are, no doubt, the carbonic acid, the carbonate of soda, the sulphate of soda, and the chloride of sodium. The composition of the water may be much modified by letting the carbonic acid escape, either partly or entirely; this may be easily done by letting the water stand for a while, or by heating it. By either of these means the carbonate of lime, of magnesia, and of iron become insoluble. The temperature of these springs is very low, viz. about 47° F.

The two springs used for bathing are of a different chemical composition—viz. in sixteen ounces—

Carbonate of soda	1·58 grains.
Sulphate of soda	0·62 ,,
Chloride of sodium	0·23 ,,
Carbonate of lime	1·63 ,,
Carbonate of magnesia	0·32 ,,
Carbonate of iron	0·10 ,,
Carbonic acid	28 cubic inches.

It is very improbable that any considerable quantity of saline ingredients of the water should be absorbed by the skin in the bath, and it is certain that an absorption of iron, upon which so much stress was formerly laid, does not take place; but it is equally certain that these baths somehow accelerate the metamorphosis of matter, promote the absorption of exudation in the skin and cellular tissue, and reduce a congestion of internal organs.

Tuberculosis.—Every Medical man knows that by a

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careful physical education the disposition to tuberculosis may be greatly reduced, and even annihilated. In the former case either the commencement of the disease is retarded, or the affection does not reach a great intensity, or both, For such purposes the stay in a mountainous country during summer, a judicious diet, and the administration of whey, milk, and a mild saline mineral water, has a most beneficial influence. The springs of Obersalzbrunn are very efficacious in catarrhs of the intestines, which so frequently accompanies tuberculosis, and which exercises a detrimental influence upon the condition of the lungs, as nutrition is impaired by them. At the same time the local effect of some of the ingredients of the springs is useful in diminishing or curing the chronic catarrh in the lungs, which generally prevails in consumptive patients. Perhaps the increased quantity of alkaline matter introduced into the blood by the use of the springs may also diminish the disposition to the formation of tubercles; but it is, no doubt, chiefly the improved general state of nutrition which acts favourably. In cases of far-advanced tuberculosis, no curative effect can be expected here; but the cough and expectoration may be relieved: the weight not unfrequently increases, and the symptoms of collapsus may also disappear, at least, for some time; provided, of course, that the journey to the place is not too fatiguing for the patient, the weather favourable, and the patient can afford to provide himself with domestic comforts.

3. *Catarrhs of the Respiratory Organs not Dependent upon Tuberculosis.*—Chronic inflammation of the larynx, the windpipe, and the bronchial tubes, are differently affected by the springs, according as their causes differ. If they are consequent upon cold, or acute eruptive diseases, such as smallpox, typhoid fever, etc., they are much more easily cured, than if arising from emphysema of the lungs, and valvular disease of the heart. In the former the springs act by accelerating the metamorphosis of matter, by altering the composition of the blood, in consequence of the carbonate of soda which is taken, by the contact of the carbonic acid with the respiratory organs themselves, and by the promotion of all natural secretions. In such cases the pure mineral water is given in gradually increased doses; but if emphysema and heart-disease are present, the water should only be taken either when it has stood for some time, and the carbonate of iron, etc., has been removed, or when mixed with whey. The same holds good for whooping-cough.

3. *Catarrhs of the Intestines.*—If chronic catarrh of the stomach and intestines is a remainder of an acute catarrh, or an eruptive fever, the so-called *status gastricus chronicus*, the effect of the springs is very considerable, especially if at the same time a judicious diet is observed, very little solid food is given, but beef-tea, eggs, and light wines form the chief nourishment of the patient. Sometimes, a few days after the waters have first been taken, a slight diarrhœa is induced by them, and with it the catarrh of the stomach and the upper part of the bowel disappears. If the catarrh of the stomach is, however, a concomitant symptom of ulcer, the water must be deprived of its carbonic acid before being used, as by the ructus, which may be induced by taking it, a lesion of continuity of the stomach might be induced. Whey is also often added in order to prevent such concussions of the stomach. As ulcers spread more easily, if the digestion is much disturbed, and the latter is decidedly improved by the use of the waters, the ulcers are also not unfrequently benefited by them. After a methodic use of the waters certain entozoa, especially tænia and nematodes, are often evacuated.

4. *Hæmorrhoidal Affections.*—If dilatation of the hæmorrhoidal veins, with consequent affections of the nerves, inflammation of the mucous membrane, and hæmorrhage, arises from pressure upon the mesenteric veins by stercoral matters, and other causes of portal plethora, the springs of this place have a most beneficial effect; and a great number of patients are quite cured when they leave here, although they have generally to return every summer, as their mode of living at home brings back their habitual sufferings. There can, however, be no doubt, that the springs of Karlsbad, Marienbad, and other places, which contain a larger amount of salts, are in most such cases preferable to our springs. If hæmorrhoidal complaints are the consequence of diseases of the lungs and the liver, the effects of the water are, of course, less marked.

5. *Lithiasis.*—In cases of lithiasis, the pure springs, and food out of which no acids can be formed, are prescribed; whey, however, ought not be given. The strong acidity of the urine is soon diminished by this treatment; it becomes neutral and even alkaline; and exudations of uric acid are neutralised and absorbed. Baths are also given in such cases, to which a considerable amount of soda is added: this being one of the few salts, the absorption of which through the skin into the blood is very probable.

BERLIN, April 12.

ON TRANSFUSION IN PARTURITION.

AT a meeting of the Obstetrical Society of Berlin, some weeks ago, Professor Martin related the history of a case of transfusion, which operation he had performed on a parturient woman, who had been exhausted by internal hæmorrhage to a most dangerous degree, and which he had repeated after the child was born, and hæmorrhage had again set in with consequent collapse,—on both occasions with the most striking success. He thereby furnished a new and very valuable contribution to the history of transfusion, an operation the value of which has not by any means been sufficiently acknowledged, and which has not been so extensively performed as it deserves to be. There are only 57 cases of transfusion on record, an almost incredibly small number, if we consider how often the Obstetric Physician has need of such a remedy. For among these 57 cases, recovery took place 45 times; while in the remainder other diseases which had either been in existence before, or had set in at a later period, led to a fatal result in eleven cases, and in one only death took place in consequence of the operation. In face of these favourable results it appears strange that the operation has not been practised more frequently; but the fact is, most Medical men look upon it as a last desperate effort to save life, and scarcely as more than a mere experiment, which may only then be made when nothing can be lost. Mephistopheles, in Goethe's "Faust," says:—

"Blood is quite a peculiar juice,"

and, perhaps, Medical men have been afraid that to this "peculiar juice" peculiar dynamic qualities might appertain, which might be in close relation to the mind, and which might be different in different individuals; and they have been fearful of injecting with strange blood also a part of the strange mind, the "anima" in the sense of Stahl; which, no doubt, must be unpleasant to the individual concerned, if such were the case. These and similar objections are fortunately not grounded on experience, but are only productions of speculative minds; and I should be extremely glad if the communication of the following case would induce any of my colleagues in England to resort more frequently to the operation mentioned, than has been done up to the present time:—

Mrs. W., aged 20, a lady of delicate constitution, and well-known in society for her accomplished singing, had the misfortune to be thrown out of a sledge, at a large sledge-party, which was got up in this city on last New-Year's day; she being then at the end of the eighth month of pregnancy. The symptoms which appeared in the first instance, were treated by her Medical attendant with laxatives. On January 5, pains in the abdomen became very troublesome, which he considered to be due to metritis. For these he ordered a venesection; later in the evening of the same day labour was evidently coming on, which he tried to facilitate by ordering the powder of ipecacuanha and a vapour-bath. While the patient was sitting in the latter, a considerable external hæmorrhage took place, which continued after the membranes were ruptured, and augmented the collapse which had already come on. Professor Martin was called in on January 6 at five o'clock in the morning. At this time the patient appeared very pale, the eyes were deep in the sockets, the features haggard, the skin cool, the pulse small and frequent. The os was rigid and hardly an inch in diameter; the head was deep in the pelvis, the fundus uteri was felt in the epigastrium, was tense and sensitive to pressure; the pains were rare and inefficacious. The kolpeurynter was now introduced in order to cause dilatation of the os; but all endeavours to restore the lost strength by the administration of beef-tea, eggs, wine, etc., failed, as the patient vomited everything immediately after having taken it. At the same time she complained of increasing tension of the

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abdomen and extension of the fundus uteri; which latter appeared to be more pointedly prominent. Delivery by turning could not be undertaken, on account of the rigidity of the os, and the deep position of the head. The life of the mother was, however, evidently endangered by internal hæmorrhage, as the pulse was scarcely perceptible and the patient became anxious, faint, and began to sigh. At eight o'clock in the morning, Professor Martin determined to perform transfusion, in which he had great confidence, as he had already successfully practised it on another occasion. A strong healthy man was soon induced to allow venesection to be performed upon him. This was done by Professor Martin's assistant, Dr. Strassmann, while the Professor himself made an incision in the skin above the vena mediana, and then pushed the trocar into the fixed vein. The blood, which had been received in a cup surrounded by water, at a temperature of 100° F, was immediately drawn into a glass syringe, which had previously been gently heated, and was then injected into the canula of the trocar. This process was repeated five or six times, and altogether five to six ounces of fresh blood, which had not been defibrinised, were injected into the vein of the patient. The syringe was continually held upright, so that the air-vesicles which entered with the blood, arose against the piston of the syringe. Even while the operation was being performed, the lady showed signs of returning consciousness, her cheeks regained a little colour and the pulse became stronger. The labour now became more effective, and the os was more dilated, so that at ten o'clock in the morning the forceps could be applied; and the child, which had been dead for some time, was extracted. The placenta immediately followed, and with it about two pounds of black, clammy blood; the external part of the placenta showed evident signs of compression on two-thirds of its surface, so that no doubt could be entertained about its having been separated for a long while from its place of insertion, and effusion of blood having taken place at the same time with it. At first the patient seemed pretty well, after the uterus had been emptied, and the fundus contracted satisfactorily; but a quarter of an hour afterwards a fresh hæmorrhage took place, which although soon stopped by the administration of secale cornutum and cold injections, still left such a degree of weakness, that the patient began again to vomit medicines and food, and lost all consciousness. At the same time the pulse disappeared, and the extremities were covered with cold perspiration, so that death was evidently imminent. Shortly after 11 o'clock, a.m., Professor Martin made transfusion for the second time, and now with the blood of another healthy young man, 20 years of age, into the vena cephalica dextra, into which about two ounces of fresh blood were injected. The patient immediately rallied, and after some beer and spir. ferri chlor. æth., and tinct. chin. compos. had alternately been given, sleep ensued at one o'clock in the afternoon. The patient was then in a copious perspiration, and on awakening in the evening, seemed calm and in good spirits. As there was a high degree of anæmia, and the lady was of a delicate and irritable constitution, her recovery was protracted over some weeks; but it was complete towards the end of February.

Several years ago Professor Martin performed transfusion under similar circumstances, with equally beneficial effect; and the case just described has given a fresh proof of his skill and resolution under most difficult and trying circumstances. It is scarcely necessary to make any further remarks on this case, as it speaks for itself. Twice the life of the patient was endangered to the last degree by repeated hæmorrhages, and all stimulants and food had been given in vain; and twice transfusion saved life. In this as well as in other similar cases the rapid and favourable effect of transfusion was immediately manifest, even while the blood was being injected, by the return of consciousness, the stronger pulse and the reappearing colour of the cheeks, so that there could not be any doubt as to the truly reviving influence of the operation.

As this matter is of such great importance, I will make a few remarks on some of the more salient points of the operation.

1. Concerning the indications for resorting to transfusion. If the loss of blood has been so great that the skin and the mucous membranes are colourless throughout, the extremities cold, the pulse small and scarcely perceptible, and fainting supervenes, the operation ought to be performed, provided that these symptoms are not short and temporary, as is frequently the case after the sudden loss of a trifling quantity of blood by venesection, when the patients generally soon recover. If, as in the case just described, obstinate vomiting, which accelerates the exhaustion, is added to the other symptoms, transfusion ought not to be deferred one instant longer, if we wish to prevent death, which cannot be retarded by any other means.

2. The question has been asked, whether it would be advisable to perform transfusion while the hæmorrhage is not yet stopped; and I quite agree with Professor Martin, who affirms it most distinctly, while he, of course, at the same time, recommends that all suitable means should be employed for stopping the hæmorrhage. In several cases of this kind which have been published, the operation, under such circumstances, was most successfully accomplished. Aside from the general effect of transfusion, we must also consider the local influence it has in exciting contractions of the uterus, partly by the increased afflux of blood to the muscular fibres of that organ, but more especially by raising the nervous power, whereby the relaxed womb is again excited to contract.

3. The apparatus used by Professor Martin is distinguished for its simplicity and transportability. It consists of a moderately-curved trocar for opening the vein and injecting the blood. This instrument is 4½ inches long, curved in a radius of two inches; at the top it is 1½ lines broad, and the handle is 3 inches long. The four-edged point of the trocar projects 2 lines beyond the aperture of the silver tube. The latter has superiorly a funnel-shaped nozzle, which is wide enough to receive the top of the syringe. This latter is of glass, 7 inches long, and capable of holding two ounces or a little more, and has a piston, around which cotton threads are wound. The syringe ought to be of glass, because then we have the advantage of being able to see the contents of it, and can distinguish any air-vesicles, which may have entered; besides it is more easily kept clean.

4. As to the choice of blood, it is only necessary that it should come from a healthy man, whose mind is not excited at the time. Professor Martin does not advise defibrinisation of the blood; partly on account of the time that is lost thereby, and partly because no ill effects have been observed after the injection of blood containing fibrine. For the same reason he rejects the addition of salts, which has been recommended in order to prevent the coagulation of the blood. His plan is to receive the blood streaming from the vein, in a porcelain cup, which stands in a large vessel filled with water, heated to a temperature of 100° Fahr. The syringe is also filled with water at the same temperature, immediately before making the injection. The blood to be injected ought not to stand for any time, but ought to be at once injected, freshly as it comes from the veins. Regarding the quantity to be injected at one time, it seems, according to present experience, most advisable to inject only two ounces at once, so as to prevent overloading of the right ventricle. If larger quantities have been transfused, dyspnœa, anxiety, and uneasiness have been observed; as has been especially shown by the late Professor Dieffenbach, and by your countryman, Dr. Blundell.

5. In performing the operation, Professor Martin lays open, by an incision into the skin, the largest of those veins of the arm which are usually chosen for venesection. The first trocar is then gently pushed into it half-an-inch, while at the same time an assistant performs venesection upon the person whose blood is to be injected; the syringe is then emptied of the water, filled with blood, and at once pushed into the funnel-shaped aperture of the canula of the trocar, and slowly discharged. The state of the pulse and the heart, as well as the aspect of the features, are now carefully observed; and if no considerable effect takes place, the operation is repeated.

6. As to the dangers consequent upon this operation, up to the present time only one case has been recorded in which death was caused by transfusion in consequence of air having entered the vein; but in this instance the jugular vein had been opened, which should be avoided on account of the possibility of that danger. Besides, a slight phlebitis has now and then been observed, but without being attended by any serious consequences. It is therefore evident, that the possible dangers of the operation are totally out of proportion to the certain danger of death from anæmia which threatens the patient at the time.

7. Much controversy has existed, and still exists, about the manner in which transfusion acts; and, independently of

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mystical explanations, the question has especially been discussed, whether it acts as compensation of the loss of blood, or as a stimulus to the nervous system; but it is quite evident that this would be an artificial separation of effects, as blood cannot be injected into anæmic persons without inducing an increased absorption of blood by the tissues,—that is to say, without increasing nutrition; while a mere stimulus would only act as do internal remedies, camphor, musk, etc., and would only cause a last flicker of nervous power before it is totally extinguished. But it is quite possible that in cases of such extreme anæmia, the sudden arrival of new nutritive matter may occasion such a rapid and energetic reciprocal action between the blood and the elements of tissues, that it may, at the same time, act as stimulus for the specific energy of the nerves. The latter hypothesis is rendered likely by some of the phenomena which are observed immediately after transfusion has been performed,—as, for instance, the feeling of heat in the part where the injection has been made, and which extends to the heart and even over the whole body. But the chief stress must no doubt be laid upon the improvement of nutrition; and with this view agree the experiments of Dr. Blundell and others, who have kept animals alive for days and weeks merely by injections of blood.

8. Finally, the question remains to be considered, whether the effect of transfusion ought to be ascribed to some special constituents of the blood; and if so, to which of them. Experiments on animals have shown, that mere injections of serum have no particular influence in inducing re-animation; while it is indifferent whether the blood has been defibrinised or not. The blood-globules, therefore, seem to be of chief importance, and although we have no direct experimental proofs of this at the bedside, as transfusions with mere serum have, of course, never been performed, still the results of the researches on the composition of the blood in anæmia from other causes—for instance, chlorosis—furnish us with a clue for the elucidation of this point. The most striking symptoms of chlorosis are weakness, faintness and syncope, vertigo, ringing in the ears; that is, phenomena which are quite analogous to those which require transfusion, and only differ from them in intensity. In such cases, however, there is no diminution of all the solid ingredients of the blood. It is well known that the albumen is only rarely diminished, is frequently normal, and sometimes even increased; but the amount of red globules is invariably, and often very much, diminished. If the loss of blood has been very great, lymph and other fluids are rapidly absorbed from the parenchyma of the organs into the blood. With these fluids albumen also enters the blood, so that the loss of the latter, although it may not be entirely covered, still is partly compensated. Red globules, however, cannot be formed in so short a time, and as in chlorosis we are justified in ascribing the analogous phenomena of weakness in the nervous and muscular system to a diminished formation of these globules, which extends over a longer space of time, thus I think the conclusion cannot be disputed, that the favourable influence of transfusion is due to the fresh importation of these elements.

In conclusion, I wish to direct the attention of your readers to a *brochure* on Transfusion recently published by Professor Martin, in which this eminent Physician, proceeding from a previous case which had occurred in his practice, has fully developed his views on the indications, the effect, and the mode of performing the operation; and in which he has also given a tabular view of all cases of transfusion which have been published, together with diagrams of the instruments used by him. The title of this *brochure* is "Uber die Transfusion bei Blutungen Neu-Entbundener," Von Professor E. Martin. Berlin: 1859 (on Transfusion in Hæmorrhages of Newly-Delivered Women).

THE PROFESSORSHIP OF PATHOLOGICAL ANATOMY, UNIVERSITY COLLEGE.—Dr. Jenner has just resigned this Professorship, which he has held since 1848.

DEATH OF A CENTENARIAN.—Miss Agnes Baillie, sister of the late eminent Physician Dr. Mathew Baillie, and of the celebrated authoress Miss Joanna, as also niece of Dr. William and John Hunter, died on April 28 last, in the hundredth year of her age, at Hampstead, in which suburban locality she is believed to have been the oldest inhabitant.

GENERAL CORRESPONDENCE.

INDIANS IN THE BRITISH SERVICE.

LETTER FROM PROFESSOR SYED ABDOOLLAH.

[To the Editor of the Medical Times and Gazette.]

SIR,—The appointment of Assistant-Surgeons for India had been open for competition for all, and many natives of India had availed themselves of it, had passed with the greatest honour and distinction, and are now serving with great zeal and ability in Her Majesty's regiments in India; and, as these men were educated in that country, and knew the native language thoroughly, so that on their arrival in India they could have no difficulty in prescribing for any form of disease which they would be called upon to treat, simply on account of their knowledge of the Hindoostannee language, their being able to converse fully with their patients, so as to be able to discover the peculiar symptoms of each particular disease,—and I need not tell you, Sir, that the treatment of a disease which a Medical man adopts is extremely judicious in proportion to the accuracy with which he recognises symptoms, and, on the contrary, a wrong diagnosis of disease is fraught with the greatest danger to the patient, if the Physician does not discover the real nature and true cause of the disease. I have known lamentable results to have arisen in India from Englishmen not understanding a word of the language, unable, of course, to discover the characteristic symptoms by which diseases are known, not from a want of professional knowledge, but through ignorance of the native language. As in these days of competition, these natives of India obtained their appointments through Professional merit alone, they were without doubt "the right men in the right place." These were the sort of men we required for the health and safety of our native soldiery in India, and these are the kind of men that the Secretary of State for War prohibits now for competing for Assistant-Surgeoncies in the Army.

Immediately after the case of Dr. Thompson was brought to the notice of the public, Colonel Sykes, on the 1st of March, asked the Premier, in the House of Commons, whether the Government considered that the 87th section of the Act 3rd and 4th William IV., cap. 85, which enacted "That no native of the said territories (India) nor any natural born subject of His Majesty residing therein, shall by reason of his religion, place of birth, descent, colour, or any of them, be disabled from holding any place, office, or employment under the said Company," was applicable only to the admission of natives into the service of the East India Company, and not into the service of the Crown; and whether Her Majesty's subjects residing in India have or have not the same rights now as they had under the East India Company, and which Her Majesty's subjects possessed residing elsewhere? Lord Palmerston, in answer to this question, said "that the claim of Her Majesty's subjects in India to employment in the public service had not been in any way affected by the transfer of the Government of India from the East India Company to the Crown."

Also, on the 15th March, Colonel Sykes asked the Secretary of State for India the same question as the above, and Sir C. Wood agreed with Lord Palmerston, and said "that circumstances had not changed since the Act of 1833, and that no alteration had been made as to the admission of natives of India to the public service."

After the Mutiny, when India came into Her Majesty's possession, the Queen issued a Proclamation (in 1858) to the natives of India, in which it was stated, "And it is our further will that our subjects of India, of whatever race or creed, be freely and impartially admitted to offices in our service, the duties of which they may be qualified by their education, ability, and integrity duly to discharge."

There are at the present time a great number of East Indians studying at the different Metropolitan Hospitals and Colleges, in Edinburgh, Glasgow, etc., with a view to qualify themselves for competing for appointments in the army. They came to this country on the faith of an Act of Parliament, and on the confidence of Her Majesty's gracious Proclamation.

If East Indians are to be debarred from entering the Army, this step will in a great measure retard the progress of Medical

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education in India among the natives, as there will be no encouragement and no inducement for them to come to this country for the purpose of furthering their Medical studies.

Natives of India and of other tropical countries are judged by the Secretary of State for War as being constitutionally unfit to perform the duties of Medical officers in cold climates. Reasoning from this hypothesis, Her Majesty's British army in India, from the Commander-in-Chief to the private—natives of a cold climate—are constitutionally unfit to perform the duties of their profession in that tropical country, and as well in Sierra Leone, the West Indies, etc.

The argument against the admission of natives of Hindoostan to the Army Medical Service is weak and unfounded. It has been proved by experience that a cold climate makes not the slightest difference to the capability of an Indian to work in England. For instance, there are no less than 500 natives of India at present in England of all classes, ranks, professions, and ages, some at the advanced age of 70, and they all prefer the cold climate to their own warm one.—I am, &c.

SYED ABDOOLLAH,
Professor of Hindoostani at University College.

London, May 7.

CONSULTATIONS WITH HOMŒOPATHS.

LETTER FROM MR. HINE.

[To the Editor of the Medical Times and Gazette.]

SIR,—Your last week's impression contains a letter signed "Provincial Physician No. 2," in which a parallel is attempted to be drawn between Practitioners of Homœopathy, and members of our Profession, who, according to the dictum of the writer, practise in one particular differently to what his judgment would approve. The implied query in this letter is, Why should I not refuse to meet these gentlemen, whose tenets I consider a tissue of absurdity, as well as the Homœopath? I think the cases rest upon an entirely different foundation, and it appears to me most illogical to confound them. I refuse to meet the Homœopath because I have nothing in common with him; his pathology and his treatment of disease are to me a monstrous farce. The very phraseology he employs is an unknown tongue. How different is the case of a brother Practitioner whose treatment of a particular disease, or whose mode of prescribing differs somewhat from my own. The writer asks, "Am I to refuse to meet a fellow Practitioner because he avoids mercury, and exhibits hydriodate of potash in all stages of syphilis; or another, because he combines many ingredients in one prescription?" Certainly not. It surely cannot be very difficult to meet in consultation without running foul of a single peculiarity. Has it ever occurred to the "Provincial Physician No. 2," that he himself may possibly have some favourite crotchet in theory or practice, which would not be received as orthodox by the Profession generally? Let us by all means treat the Homœopathic charlatan with the contempt he deserves, but let us exercise a proper charity towards those between whom and ourselves there may be a slight difference of opinion.

I am, &c.

Nottingham, May 7. SAMUEL D. HINE, M.R.C.S.

STATE OF THE PUBLIC HEALTH.—121,713 deaths were registered in the past quarter; and this number was rather lower than the number of deaths in the winter quarter of the preceding year. The death-rate was 2·449; the average rate of the season being 2·480. The increase of the population in particular parts of the country is uncertain; but assuming that the estimated rates of increase are tolerably correct, the mortality (2·671) in the town districts was (·017) above the average, whereas the mortality (2·235) in the country districts was (·018) below the average. 121,713 deaths were registered in the quarter; and as at the rate prevailing in the least unhealthy districts, the deaths would have amounted to 88,864, the unnatural deaths may be set down as about 32,849, referable directly to the circumstances unfavourable to life in which the population is living. Painful as this recorded loss of life is, it is yet gratifying to know that nearly all those fatal circumstances admit of mitigation by sanitary measures.—*Registrar-General.*

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

FRIDAY, APRIL 23, 1861.

DR. BABINGTON, President, in the Chair.

A Paper, by Dr. HENRY M'CORMAC, of Belfast, was read,

ON THE TRUE NATURE AND ABSOLUTE PREVENTIBILITY OF TUBERCULAR CONSUMPTION.

The object of this Paper is the setting forth of the foregoing thesis and the proof thereof. The writer begins with an exordium to the effect that the statements which he makes in corroboration of his views, are in exact accordance with the laws of the living organism, laws which never vary, and that consequently these views must be adopted, if only set forth with sufficient firmness and consistency. He recites the various efforts which he has at different times made to disseminate his views, and then proceeds to state, in brief, in what these views consist. He affirms that there is a constant movement in the animal economy, of integration and disintegration, new tissue being continually formed and the effete tissue being as continually rejected; that when the effete tissue is efficiently got rid of there is health, and that when it is inefficiently got rid of there is disease. The foundation of this double movement resides in incessant food and air-supplies, the food serving to form new tissue, the air, or at least the oxygen of the air, serving to burn off the old or effete tissue. But in order to this result, it is needful that the air should be pure, or approximatively so, since air respired once or oftener, does not oxidise or sufficiently oxidise, the else retained waste, or enable the economy to eliminate it. In short, the effete matter is not oxidised, is retained in the blood instead of being rejected from it, and is finally deposited, dead and waste, in the living tissues where it has no business to remain. The author of the paper then goes on to show that tubercle, so named, is no other than this effete tissue, in other words, that effete tissue and tubercle, tubercle and effete tissue, are convertible terms, as the things they are names for, are convertible. For tubercle is divested of all actual vitality, as well as of all traces, in its then form, of antecedent vitality. It is dead matter, carbonaceous waste, lung waste, not oxidised, by reason of the absence of adequate oxygen in the respired air, and consequently retained, instead of being rejected from the organism. The study of nature reveals a unity in all its parts. If we live in conformity with Nature's law, we have health, if we violate the natural law we have disease. It is in keeping with the natural law to respire a pure atmosphere, it is a violation of it to respire a foul one. There is a daily food supply of two pounds, a daily excretion of two pounds or nearly, to balance it. The process is instant as it is incessant, varied indeed to a greater or less extent by effort and repose, but always keeping within a narrow margin. If the total daily waste, of some thirty ounces say, be divided into the total mass of the organism, the result will be the period necessary for the renewal of the entire frame, and the dissipation of the effete matter by oxidation. If, however, there be any residue, any portion of effete tissue, so far as the carbon waste, or the carbon waste mainly, is concerned, that is not oxidised, the residue in question remains in the system, and is deposited, or liable to be deposited, as tubercle in the living organism. Any mode of life, as sedentary, stationary habits, in-door seclusion, inaction of the vocal and other muscles, that lessens the consumption of oxygen, is also favourable to the production of tubercle. For if there be insufficient oxygen, the effete tissue is not burnt off, the carbon waste accumulates in the blood, and tubercle deposits are inevitable. Atmospheric oxygen, sufficiently pure, sufficiently abundant, depurates the blood, whereas the converse results in disease. A longer or a shorter daily walk, a deeper or shallower chest, the occupation of a sleeping-chamber by one or many, a stationary and passive, or a vigorous and active life within doors, are the several factors which may eventuate in life or in death. For the living organism needs air and action, and a stagnant atmosphere often respired, with closed air-spaces, and

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muscular torpor, bring physical perdition and death. Four per cent. carbonic acid gas are exchanged at each several respiration for the inspired oxygen, which may accumulate till eight or even ten per cent. shall subsist in the respired air, after which no more carbonic acid is poured out, the effete tissue remains in the blood, and unless a purer atmosphere be sufficiently soon respired, the necessary result is the depositing that effete tissue, sooner or later, as tubercle in the economy. Dr. M'Cormac insists particularly on the circumstance that, until pointed out by him, in the year 1855, no one was able to furnish any rational theory for the production of tubercle. Even those who admitted that closed room-spaces, sedentary life, and a foul atmosphere were productive of phthisis, up to that period, were entirely at a loss to say *why* it was so. For, in effect, effete tissue and tubercle are one. Every fact in pathology proves it; every process in the organism but lends fresh force to a conclusion, which, if turned to proper account, would with certainty relieve humanity from a ravening scourge. The skin and lungs need incessant ventilation beneath the free heavens, or at least in communication with the mighty reservoir of the atmosphere which abounds with an inexhaustible supply for every lung. Insolation and self-ventilation, and muscular effort, are all needed to further the proper degree of metamorphic tissue-waste, and its subsequent oxidation and elimination from the economy: for when the effete matters are burnt off there is health; when they are retained, there is disease. Like laws govern the economy at the equator and the poles; everywhere there is tissue metamorphosis, everywhere elimination of the effete waste. The pound of meat and pound of bread, or their food-equivalents, are consumed daily to maintain the movements of the organism. It is a tale about men consuming less at the equator, needing more at the poles. The plastic and respiratory food do not subsist as such, but only as part and parcel of the ordinary food-supplies of the living frame. The inorganic matters, likewise, are furnished similarly, day by day. The food, as food, is not disintegrated, oxidised, and expelled, but only the effete tissue, no longer of use, but only a poison in the organism. If there be not food enough, food varied enough, the result will be a failure in the action of the organism. On the other hand, the best and most varied food-supplies, without effort, without air to oxidise and further expulsion, will be unavailing utterly to secure health and avert disease, or, in short, to complete the cycle of adequate healthy action within the organism. No hypothesis will explain tubercle-deposit on any other supposition intelligibly. Cold, without foul air, will not induce tubercle; and the absurdity of ascribing tubercle to inflammation is shown in the concurrence of tubercle, not in one or two, but perhaps in the great majority of the organs of the economy. Even phthisical persons will not have phthisical children, unless the latter be debarred from fresh air: for, if only the effete tissue be duly oxidised, duly expelled, tubercle-deposit is impossible; but if air loaded with carbonaceous waste, the effete matters of respiration, be respired habitually, no power on earth can avert the effete waste deposits hitherto known to pathologists under the absurd and meaningless designation of "tubercle." Not man alone, but all living creatures, are under the incumbency of breathing a pure, sweet, fresh atmosphere, not one polluted by incessant respiration, else they incur the not-to-be-avoided liability to tubercle: for tubercle is no other than effete tissue, not burnt off; and effete tissue not burnt off, is no other than tubercle. The school-girl, the writing-clerk, the close student, the type compositor, the soldier herded in close barrack-rooms with his fellows; in fine, all who respire a contaminated oxygen, oxygen contaminated with the products of respiration, in short, pre-respired air, become sure and certain subjects of retained effete matter under the guise and form of tubercle. Dr. McCormac instances the conditional liability of the Esquimaux and the Icelanders, and shows that they can only escape so long as they obey, not violate, the laws of organic life. He then proceeds to instance the remarkable exemption of the people of the Hebrides and of the north-west coast of Scotland, an exemption entirely ascribable to the respiration of a pure, instead of an impure, a sweet instead of a foul atmosphere. These people are wholly free from both consumption and scrofula. They are not particularly well fed, or clothed, or lodged; but the simple circumstance of a constant fire on the hearth, midway on the floor, an unceiled cabin, and a hole in the roof, open day and night, and always supplying fresh air, secures immunity from tubercle utterly. Dr. McCormac dwells on the provisions, they might well be termed the efforts of Nature, to get rid of a foul, already-respired atmosphere. He shows how, in open spaces, air already respired, and lighter than the surrounding medium, is carried off never to return; whereas in closed spaces, the respired air, unable to escape, is respired again and again, and inevitably conducts to retarded metamorphosis, absent or impeded oxidation, and inevitably retained tissue-waste, with all its train of disastrous consequences. If any one deny these alleged consequences, it is open to him to rebut them, or to show what becomes of the effete carbon waste, when oxidation and expulsion, more or less partially fail. It is not got rid of, but as Dr. McCormac asserts, is converted into tubercle, poisoning all those morbid results summed up under the terms scrofula, struma, hectic fever, hæmoptysis, and finally death. The *instantia crucis* is of the easiest. It is only needful to confine some living breathing creature in a closed air-space, but otherwise well supplied with food and drink, thus coercing them to respire their own pulmonary excretions, in order, with the unfailing certainty of cause and effect, to induce tubercle-deposit in the living economy. The effete matter is not oxidised, not expelled, and, consequently, is deposited as tubercle, in skin, or bone, or gland, or flesh, with entire and unvarying certainty. In free open spaces, or in spaces to which an untainted atmosphere has unrestricted admission, tubercle is impossible. But when the same atmosphere is respired again and again, tubercle is inevitable. Every one knows the tubercle-tainted condition in the large airless milk-dairies of Paris and London. The monkeys and other animals housed in the airless cells of the Zoological Gardens of those cities, died tuberculous. Yet, now, since more judicious arrangements have been adopted, the animals are exempt from tubercle as they would be in their native wilds. The conversion of tissues, with the needfulness of oxidation, is not less instant in man than in the brute, in the brute than in man again. And if the multitude were but aware of these things, aware of the perilous facility with which tubercle, under fitting conditions is deposited, they would be as heedful to avoid these conditions, as they are now unhappily indifferent. Nature employs most express means to avoid tubercle-deposit; we, it would almost seem, express means to ensure it, thus flying in the face of the Divine economy and the means appointed for our conservation. The fate of children consigned to ignorant nurses, besotted parents,—children to whom a pure atmosphere is indeed the breath of life,—is especially to be commiserated, forced, as they too often are from their earliest years, to live in instead of out of doors, to sleep in close, airless apartments, even in cradles over which, not satisfied with the fouled air of the chamber, a cover is too frequently thrown. Dr. McCormac winds up with comments on the ravages of consumption and scrofula, which, he asserts, follow entirely from the respiration of a befouled and impure atmosphere. For this, he states, is the *causa sine quâ non*, without which consumption or scrofula there could not be. An imperfect hæmatosis, deficient aëration of the blood, insufficient oxidation of the tissue waste, are the conditions short of which tubercle is impossible. Consumption and scrofula are as purely artificial, as entirely avoidable, as poisoning by arsenic or corrosive sublimate. There need be neither of them if men will. The air by day, if possible, assuredly by night, should be as pure as that which traverses the hill-top or is washed by the sea-wave. Dr. McCormac would as soon send an infant to sleep in a cellar as in an airless nursery; and he considers that there can be no immunity from the two-fold scourge of phthisis and scrofula until Medical practice and popular conviction concur alike as to the indispensableness of fresh, untainted air.

The PRESIDENT proposed, in the usual manner, that the thanks of the Society should be given to the Author of the paper.

Dr. CHAMBERS considered that the reading of such a paper was a waste of the Society's time. It was full of unproved statements, and not deserving the thanks of the Society. He should certainly protest against the thanks of the Society being given to the Author.

The PRESIDENT considered that it was an act of courtesy to award the thanks of the Society to those who had taken the trouble to prepare a paper.

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Dr. O'Connor agreed with Dr. Chambers that the Society's time had been wasted. The paper was a mere commonplace in romantic language. He wished to ask the President if the paper had been referred to any committee or body of referees before it was read.

The President was under the impression that the papers were not read by the referees until after they were read before the Society.

Dr. Tanner stated that it was desirable to know beforehand what paper was going to be read. It had been announced that a paper would be communicated by Mr. Birkett. He certainly should not have come to hear the paper just read. Dr. M'Cormac called on the Society to answer certain questions; he would remind Dr. M'Cormac that he might ask more questions in five minutes than the Society could answer in an evening. The views brought forward were not even new, as Dr. M'Cormac had written on the same subject some years ago. The paper consisted of continued iteration of the same things in other words. There was no wonder that the meetings had dwindled down to the few members who were in the room that evening, when such papers were read before the Society.

Dr. Little agreed with the previous speakers in their opinion of Dr. M'Cormac's paper. He wished to know if there was not a committee to whom papers were referred before they were read.

The President stated that he had no power to allow discussion foreign to the subject of the evening. It should, however, be his care that the opinions expressed should be fully considered.

Mr. Ashton concluded that the thanks of the Society were *not* awarded to Dr. M'Cormac.

A paper, by Mr. Thomas Ballard, was read, on

A PREVIOUSLY UNOBSERVED PREVENTABLE CAUSE OF IDIOCY, IMBECILITY, AND THE ALLIED AFFECTIONS.

The deplorable condition, idiocy, is neither limited to locality nor to any rank of society. The two most recent writers on the subject, Dr. Howe, of Massachusetts, and Dr. Morel, of Rouen, attribute it to certain defects, either moral or physical, on the part of the parents; but neither of these theories, nor the more popular one of intermarriage with near relations, seems to afford a satisfactory explanation of its production. Dr. Guggenbühl, whose experience at the Abendberg is said to have rendered him the greatest existing authority on the subject, has stated the result of his observations to be "that the debased mental and physical condition termed cretinism consists in an affection of the cerebro-spinal system—most probably cerebral œdema; and is associated with rickets, hydrocephalus, and other scrofulous manifestations." He denies the hereditary tendency to it, and regards it as exclusively a local phenomenon fostered by certain exciting causes which are in operation during the first three years of life. Dr. Guggenbühl seems not to have ascertained what these causes are. The author had arrived at similar conclusions respecting the interdependence of these various morbid phenomena; the object of the present communication being to direct attention to the cause which he believes to be principally engaged in producing them. In a work which he had recently published, entitled "A New and Rational Explanation of the Diseases peculiar to Infants and Mothers," it was shown that "the exercise of the instinctive act of sucking under circumstances unfavourable to the infant obtaining food is a principal source of disease to infants and puerperal women;" the result of this fruitless sucking being an excessive reflex secretion of gastric and intestinal juices, which corrode and soften the mucous coat of the intestinal canal, thus severely injuring the digestive powers, and consequently preventing the proper growth and nutrition of the various tissues of the body. The frequent and green stools which sucking infants so frequently are the subjects of are the evidence of this process of injury to the intestinal canal being in operation. And thus fruitless sucking becomes the chief cause of the developmental diseases of infants and children, and especially of the very pathological conditions which Dr. Guggenbühl has observed to be associated with cretinism. The author has observed that idiocy is a condition involving many of these morbid phenomena. The histories of all the cases are similar. They have suffered in infancy persistent diarrhœa, succeeded by fits or some form of convulsive disease. A large majority of them bear evidence of long-continued habits of fruitless sucking in the deformity of the jaws, which is caused by some portion of the hand being placed in the mouth for the purpose of sucking it at a period of life when the bones were soft enough to yield to its pressure. The upper jaw is either forced forwards, thus causing the upper teeth to project; or the lower jaw is drawn forward in advance of the upper, constituting the deformity known as "underhung." Sometimes the jaws are not deformed, yet the condition of idiocy is extreme: in such cases either the whole mischief has occurred very early in life, so as to blight the growth of the brain, thus producing an idiot with a small head; or the habit of fruitless sucking has been continued under the form of "tongue-sucking." These latter cases add much weight to the present explanation, because the effect upon the intestinal canal is still maintained, the subjects of it having loose evacuations from the bowels, particularly during the night, and the habit being especially practised when in bed. They constitute many of the "dirty patients" in asylums. In addition to the deformity of the jaws, the defective condition of the incisor teeth is another evidence of fruitless sucking stamped upon the idiot; it results from the irritation to which the corresponding portion of the mucous membrane of the mouth is subjected during their development. The sources of fruitless sucking to which infants are very frequently subjected, and from which the retained habits above mentioned are acquired, are three in number, namely:—1. The mother's breast, when it does not yield as much milk as the infant requires. 2. The "sugar-teat," which is frequently placed in the child's mouth by the nurse, to keep it quiet. This is probably much practised on the Continent, where idiocy is very common. 3. The prevalent custom of feeding infants through artificial teats, which collapse under the pressure which is necessarily exercised upon them in the act of sucking. The author then repeated his conviction that the various forms of convulsive disorders of infants are not dependent upon eccentric causes, such as teething and worms,—but that they are really the evidence of cerebral disease, in all probability some degree of œdema, giving rise to congestion and pressure; and that their treatment by hot baths, emetics, purgatives, lancing the gums, etc., is not the most conducive to a perfect recovery. The only effectual mode of treatment is to abstract blood, either by leeches applied to the temple, or from the external jugular vein by venesection, according to the urgency of the symptoms. To the neglect of this plan of treatment many cases of idiocy and of death are attributable. If fruitless sucking is arrested, and the head symptoms are thus treated, cases of threatened idiocy may be averted. The most important indication for the abstraction of blood is the occurrence of vomiting, especially during sleep; much mischief occurs to children, and many feeble intellects result, from the wrong interpretation of this symptom. The fundamental and most important point is to direct the attention of parents to the *mode* of administration of food. The kind of food best adapted for infants is sufficiently obvious. If the infant can obtain its food without excessive sucking, it is not subject to diarrhœa, growth and development progress properly, fits and convulsions do not occur, and habits of fruitless sucking are not acquired. The author believes that if this point could be generally understood, not only would the Registrar-General's reports show a great diminution of infantile mortality, but the physical and mental development of future generations would be much improved. Some plaster models of mouths were exhibited to illustrate the deformities alluded to; and twenty cases bearing on the various points touched upon in the paper were given in detail.

Dr. Down would make a few remarks based on the daily observation of the care of several hundreds of idiots. If he were asked if sucking the thumb was characteristic of the habits of idiocy, he should say certainly not. It was of course common amongst idiotic infants, but not more common than in other infants. About a fortnight ago, two brothers, who were idiotic, were placed under his care. There was another child of the same family, who was quite healthy. One of the idiots sucked his thumb, as did the healthy child, the other idiotic child did not. The eldest of the idiots, the one who sucked his thumb, died a few days ago. In this case, the autopsy showed that there was sufficient organic disease to account for the idiocy. There was deficiency of the corpus callosum and fornix, which, without any other theory, was sufficient to account for the idiocy. Another fact bear-

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ing on this subject had recently come under his observation. A mother of twelve children had taught all of them to suck their thumbs. The twelfth was idiotic, but all the others were quite healthy. In reference to the malformation of the jaws, he believed most of them were congenital, and were to be placed in the same category as hare-lip and cleft palate.

The PRESIDENT remarked that he could scarcely attribute such grave effects to sucking the thumb as the Author of the paper appeared to do.

Dr. TANNER remarked that everyone must have noticed that nine out of ten children sucked their thumbs. He certainly had never advised parents to check the habit, for he had never seen it productive of any mischief. He did not clearly understand from the paper whether Dr. Guggenbuhl attributed cretinism to fruitless sucking. He (Dr. Tanner) considered that the convulsive and cerebral symptoms alluded to by the Author, were due to eccentric irritation. He was surprised that the Author would not admit this as a cause of such symptoms. Surely he must have seen cases in which the expulsion of worms was followed by immediate cessation of convulsions. It was a matter of almost daily experience, that convulsions would cease after lancing the gums, when the latter were indurated and inflamed, and were obstructing the exit of the teeth.

Dr. LITTLE considered that Dr. Down had given very clear evidence that we must look for idiocy generally in some organic defect, probably congenital, in the brain. He (Dr. Little) believed that fruitless sucking would produce inanition, but simply because it was fruitless, because no nourishment was obtained, and that from this inanition certain cerebral symptoms might ensue. He considered that there had recently been a great improvement in the treatment of the cerebral affections of children. It was at one time too much a matter of routine to attack head symptoms by leeches, bleeding from the jugular, and by the administration of mercury. He would not say that even now the use of antiphlogistic remedies was not sometimes judicious practice, but the majority of cases required almost opposite treatment.

The AUTHOR considered that Dr. Down had misunderstood some parts of his paper. He did not expect that the three hundred idiots under Dr. Down's care would pass their time in sucking their thumbs, nor did he consider that fruitless sucking was a direct cause of disease of the brain, but secondarily, by producing inanition, by diarrhœa, etc. He would ask Dr. Down if the deformity of the jaws—he did not mean cleft palate or hair-lip—was not due to sucking, to what it was due? He (the Author) considered that the investigations of Dr. Guggenbuhl and himself led to the conclusions he had submitted to the Society. He maintained that the cerebral defects were more likely to be due to the causes he had mentioned than to reflex irritation from teething, worms, etc. He did not think either, as Dr. Little appeared to believe he did, that the cerebral symptoms in infants were always to be treated by antiphlogistics, but he was sure that often they were very much relieved by small bleedings.

The Author then showed several casts to the Society, and an oil painting, representing a child in the act of sucking a sugar teat, as is customary in Germany.

EPIDEMIOLOGICAL SOCIETY.

MONDAY, APRIL 8, 1861.

DR. BABINGTON, President, in the Chair.

A Paper, by Dr. SMART, was read, on

THE CLIMATOLOGY, TOPOGRAPHY, AND DISEASES OF HONG KONG AND THE CANTON STATION. PART I. CLIMATOLOGY AND TOPOGRAPHY.

Dr. Smart commenced by stating that he was desirous to place before the Society the results of his observation during a service in the Royal Naval Hospital, Hong Kong, from May 1857 to July 1859. Considering, further, that the Medical records of an establishment, dating from the early days of that colony, would repay a thorough inquiry, by elucidating many obscurities and clearing away errors from our etiology, he undertook an investigation; but he was unable to render it as complete as he had purposed, owing to his recall to England on promotion. The investigation was retrospective, from June 1859 as far back as June 1846, or nearly to the period of Dr. John Wilson's "Medical Notes on China," which were founded on his experience in the same Hospital. The meteorological deductions were made by Dr. Smart from the monthly records from 1853 to 1858, kept in the Royal Engineers' Office, access to which was courteously accorded to him by Colonel Mann, of that scientific corps. A similar series of observations was also made in the Hospital-ship by Dr. Smart, in conjunction with Mr. Henry Fegan, Assistant-surgeon, a most diligent and accurate observer. This was, however, interrupted by Dr. Smart's departure just as it began to be of great interest, as showing the difference of temperature, and of air-currents in the broad harbour and in the town, situate at the base of a high peaked hill, and showing the advantage of a floating over a shore Hospital on that station. *Atmospherical Pressure.*—Elevation of the mercurial column takes place during the cool dry season of the north-east monsoon; and a corresponding depression occurs in the hot, moist, and electrical season of the south monsoon. The highest monthly average is that of January, from which there is a gradual descent, accelerated in April, until the lowest degree of pressure is reached in August, about the middle of the south monsoon, when the mercury again rises rapidly and uniformly. Thus the maximum and minimum of atmospheric pressure correspond with the height of each monsoon, and not with the variable tempestuous seasons of the changes, the pressure being about medium when these changes occur. The diurnal atmospheric wave is double; the major being at its highest from 9 to 10 a.m., and the minor from about 10 p.m. to midnight; the lowest readings between the waves being about 4 a.m. and 4 p.m. *Atmospherical Temperature.*—The mean annual temperature exceeding 73° Fahr. defines the meteorological position of Hong Kong as within the limits of the first isothermal or tropical zone, corresponding with its geographical position in 22° 16″ 10″ N. latitude. Lying thus close on the tropic of Cancer, it has not the double succession of seasons that characterise positions nearer the equator. Its summer and winter seasons are well contrasted, for its geographical position; but, owing to the prevailing winds of summer, the temperature does not at that season rise so high as at Shanghai, in latitude 31.10° N., where the thermometric range is greater. At Hong Kong, in the six years period of the tables appended to the paper, the highest temperature noted was 94.5° Fahr., and the lowest 39°, showing a range of 55.5°. The means of the highest and lowest notations of six successive years give a mean range of 46.5°. The mean mensual range of the coldest month (January) and the hottest (July) is 33.5°, which is much in excess of that of the same latitude in India. This climatic feature is appreciated by the residents, as highly invigorative of the system, relaxed and debilitated by the moist heat of the summer months; and doubtless it is so, to all who avoid exposure and excess. From November to April inclusive, the mean temperature scarcely exceeds 70°, and falls but little below 60° (January and February being the coldest months). From the middle of May, the mean temperature rises much; and from June to September inclusive, it exceeds 80°. July is the hottest month; its mean temperature in six years having been 86.25°, and the lowest mean 80.6°. The seasons may be divided as follows: the cool and dry, January, February, and March; the heating and damp, April and May; the hot and wet, June, July, August, and September; the cooling, October, November, and December. Regarded simply as a meteorological fact, the range of temperature in this climate may seem of minor importance; but it is far from being so in a sanitary point of view. When a high temperature exists, vital force is less able to endure sudden chills than in the temperate and arctic zones. Our soldiers and sailors often cannot avoid exposure on duty; and the obvious indication in such circumstances is, that they should be provided with warm clothing, and fortified with the stimulus of warm food and drinks, during the night and towards dawn. By routine, we crowd the aliment of our men into a few hours before and after midday, by which the system is left without support when most urgently demanded to ward off the depressing influence of climate. The temperature of the sun's rays, observed Dr. Smart, is an important agent in the causation of tropical diseases. So far as the observations in the tables go, they show the lowest mean of 91° in March, ascending to 120°, the maximum mean

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in August; and then descending to a medium stage of 105°, persistent in November, December, and January; after which a second descent goes on, till the minimum is attained in March. The mean of the sun's heat is low, owing to the cloudiness of the sky at that season; and the high mean of November, December, and January is dependent upon the opposite condition during these months. *Rain-fall.*—The mean annual fall of 93.18 inches in 111 days is quite enough to characterise the climate as a wet one, even if it were distributed equally through the twelve months. By far the greatest amount, and all the heavy falls, are during the strength of the south monsoon, from June to September inclusive; but more than an average quantity falls also during the variable winds at the change of the monsoon. In the north monsoon, from November to March inclusive, there is only a small precipitation in gentle showers; and it may then happen that scarcely any rain falls for months together, contrasting strongly with the summer months, when it often pours in torrents, which destroy houses, bridges, and roads. In discussing the influence of the rainy season upon health, Dr. Smart remarked, that the malarious agencies of the Canton River are very generally attributed to the extensive rice cultivation, known as the "Paddy Fields," extending mile after mile, in swamps, for many months of the year; as the rice crop, to be successful, requires much irrigation. The land produces two crops of this cereal annually; the seed-times being in March and late in July, and the harvests falling early in July and early in November, each crop requiring about three clear months. Very careful tillage is observed. The soil is ploughed and harrowed when inundated, and then drained to receive the young plants from the nursery beds. The soil is kept always sodden, and sometimes inundated, until the plant shows signs of ripening, when it undergoes a thorough drainage for the harvest, and remains dry until the ploughing for the next crop has to be done. In this course of tillage, the rice-grounds are swamps from the middle of March to the middle of June, and again from the middle of July till the middle of October. They are drained for the ripening of crops at the middle of June, and again at the middle of October, remaining dry from that time to February inclusive. The statistical table of diseases appended to the paper corroborated the view that the seasons of greatest frequency and fatality of the climatic diseases coincide with those when the rice-fields are undergoing the process of drying; and that the months of April and September, when the inundation of the fields is continuous, are healthy months. These facts seem to confirm the theory that morbific paludal miasmata are evolved from a drying, and not from a wet surface. *Winds.*—The distinctive phenomena of this climate are derived almost entirely from the great atmospherical currents termed "monsoons." The geographical position of Hong Kong is within the normal belt of the north-east trade, which would blow there all the year round, if there were no disturbing cause; and it is still the dry winter wind, called "the north-east monsoon." In the summer, the south-east trade wind crosses the equator, and strikes on the southern coasts of China, in its course towards the heated plains of Central Asia, and is then named "the south-east monsoon." Dr. Smart then entered into the climatology and topography of Victoria, Hong Kong, Macao, and Canton, respectively; especially of the first, the causes of the insalubrity of which he described at considerable length. He remarked, before concluding his paper, that intelligence had reached him at Bermuda of the cession by the Chinese of the Cowloon peninsula, facing the town of Victoria to the north and east. The shores of Cowloon, he added, present curved lines, forming sandy beeches, separated by the gigantic spurs that fall from the mountain ridge situated about five miles inland. Dr. Smart considered that, in a sanitary point of view, this possession promises to be of great value, as the gentle rise of the land in hill and valley offers an ample site for town-extension, in addition to the requirements of what will become a first class arsenal. Commercially, an incalculable advantage will arise from the fact of the town being on the side of the harbour, to which the merchant shipping are compelled to resort during the dangerous season of typhoons, to obtain the shelter of the promontory.

The second division of the paper, which treats of the Diseases of Hong Kong, etc., will be read at the next meeting of the Society.

Mr. Radcliffe considered that Dr. Smart would have elucidated the subject better, and made it more intelligible to a meeting like this, if he had projected curves of temperature, barometric pressure, etc., instead of giving tables of these phenomena.

Dr. Milroy considered that there were some important practical suggestions among the large amount of scientific matter which Dr. Smart had brought before the Society. He referred more particularly to Dr. Smart's opinion with reference to the liability of soldiers and sailors to disease at night, when they are so long left without food, and not unfrequently inadequately protected by covering and clothing. He was of opinion that much remained to be done in the army and navy with reference to the proper berthing, clothing, and providing support for the men during the night. The great period for the invasion of cholera and other epidemics was between ten at night and six in the morning.

The Director-General of the Medical Department of the Army had much satisfaction in stating that Dr. Smart's suggestion to provide a warm meal for the soldiers at night was already in use in the army, and had been adopted with marked benefit among the troops in China. Those troops had been well fed and clothed, and in every way well cared for. He exhibited the following statistics of the British army in China during the late campaign from May 1 to November 11, 1860:—

	Europeans.	Natives of India.
Number	9069	4920
Deaths	224	79
Mean sick	418	156
Ratio of constantly sick per 1000	46·09	31·71
Annual ratio of deaths per 1000 of strength	45·3	29·45
Ditto, exclusive of killed in action or dead of wounds.	38·43	23·76

Dr. Gallagher, R.N., observed that a warm meal at night had been common in many ships in the navy, without reference to the Admiralty or other superior authority beyond the captain of the ship. In the ship to which he belonged in the Baltic, during the war in Russia, the night-watches were allowed a certain period to smoke and have a basin of coffee. The same practice was in use in other ships, and with great benefit to the crews. He trusted that a recommendation from this Society would induce the Admiralty to render it compulsory in our navy to issue a night-meal to those on duty, as was the case in the French navy.

Dr. Duigan, R.N., said his experience led him to support warmly the recommendation to give a warm meal at night to men on watch, as that was the period in which they most needed protection against the invasion of disease, more especially of epidemic diseases, such as cholera.

Dr. McWilliam said he had known few men in the public service who had equal will and power to investigate not only disease, but also the meteorological and other influences producing disease, with Dr. Smart. The manner in which the whole question of the climatology and topography of that part of China had been treated was most creditable to the service, as well as to the author of the paper.

A RARE TRACT ON PLAGUE, ETC.

Mr. Radcliffe directed the attention of the Society to a very rare and curious Tract on Plague, recently printed by the Bannatyne Club, "page for page, from the only known copy preserved in the Advocates' Library." The author of the tract was Dr. Gilbert Skeyne. He was a descendant of an ancient Scottish family, and was educated at the Grammar School and King's College, Aberdeen. He graduated as a Master of Arts, and subsequently applied himself to the study of Medicine, and took a doctor's degree. In 1556, he was appointed "Mediciner," or Professor of Medicine, in King's College; and, while holding this position, he wrote the Tract on Plague now reprinted. In 1575 he removed to Edinburgh, and in 1581 he was appointed a Physician to King James VI. The tract was first published in 1568. It contains a popular exposition of the causes, symptoms, and preventive Medicine of Plague, in the vulgar tongue, and is highly interesting, not only on this account, but also from its presenting a summary of the opinions which may be supposed to have been entertained on plague by Scottish Physicians about the middle of the sixteenth century. Mr. Radcliffe also read a very curious and

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interesting letter, bearing date August 27, 1564, from the English Ambassador in Spain to Queen Elizabeth, and which contained an account of the Medical treatment of the second wife of King Philip while suffering from "fever." The letter has only recently been brought to light by Mr. Froude, during his researches in the State Paper Office. This letter also makes known an historical fact which, it is believed, has not previously been noted; to wit, that in the event of Her Majesty of Spain dying, Philip designed to have married Mary Queen of Scots.

THE PATHOLOGICAL SOCIETY.

TUESDAY, APRIL 16, 1861.

DR. COPLAND, President, in the Chair.

Dr. WILKS exhibited a Lung full of masses of

CHRONIC PNEUMONIA (PYÆMIC?).

He brought it forward in order to elicit opinion as to the question of the possibility of recovery after pyæmia of internal organs. The man had been admitted five months before his death for stricture and perineal abscess. Pyæmic symptoms followed soon after admission. He was supposed to have had pneumonia. As stated, he lived on for five months. There were several difficulties to be encountered in explaining the morbid conditions found, and although his own opinion was antagonistic to the idea of its having originated in the pyæmic process, yet the remarkable manner in which the masses were deposited suggested the idea,—these being diffused like secondary deposits, and not in the ordinary method of chronic pneumonia.

Dr. BRISTOWE considered that contraction of the lung tissue was not, at all events, in all cases the cause of dilatation of the bronchial tubes, as he had seen cases in which the lungs consisted of little else than tubes.

Dr. BRISTOWE then related the following particulars of a case in which dilatation of the bronchial tubes had been found after death:—A boy was admitted for cerebral symptoms (meningitis). There were no particular pulmonary symptoms to direct attention to the chest; but his chest being examined it was found that the whole of one lung appeared broken up, loud gurgling being heard all over. The other lung was found to be sound. There was no history of lung disease, no expectoration and no emaciation. At the *autopsy* the meningitis was found, and the suspected lung was seen to consist of little else than dilated tubes. The other lung was healthy. There was no tubercle in any of the organs examined.

Dr. C. J. B. WILLIAMS had seen several of the so-called cases of cirrhosis of the lung, and had explained their production before Dr. Corrigan miscalled them by that name. He differed entirely from Dr. Corrigan and Dr. Wilks as to their explanation of the phenomena. He (Dr. Williams) considered that it was quite plain that if the condensed tissue around the tubes contracted, the result would be that the tubes would be rendered smaller instead of being dilated. In his own cases there was nothing more than the ordinary results of plastic inflammation on the vesicular tissue. The explanation he would offer was this: in pleuro-pneumonia the air-cells become obliterated, and the lung compressed by the effused pleural fluid, and the air not being able to enter the cells, the natural result was, that the tubes were dilated, for when the fluid in the pleura was absorbed, the pressure of the air, failing to penetrate the cells, is wholly expended on the tubes, which are consequently dilated. It is interesting, he continued, to note how the method of production of the opposite condition, emphysema, confirmed the explanations above given. Here, from long continued bronchitis, the tubes contract in length, and the pressure is towards the periphery, and thus dilates the air cells. A similar method of reasoning would show that the dilatation of the pulmonary artery arose in the same way, as the artery was subject to the same force exerted on the tubes. The lung, the pressure of the fluid being taken off, must fill, and this would be partly by air in the enlarged tubes, and partly by blood in the pulmonary artery. In these cases, while the larger trunks were dilated, the capillaries were more or less obstructed; hence, such cases often terminated in dropsy. Dr. Williams considered that the increased intensity of the second sound was due to the increased size of the pulmonary artery and its valves.

Dr. PEACOCK remarked, in reference to Dr. Wilks' first communication, that he had long been aware that in cases of obstructive disease of the mitral valves the pulmonary artery and its orifice became dilated, while the aorta and aortic orifice diminished in size; and he should have thought that the fact had been admitted by all Pathologists, had not Dr. Wilks stated that it had been denied at a former meeting of the Society. In a paper on the weight and dimensions of the heart in health and disease, published in the *Edinburgh Monthly Journal* for 1854, and of which an abstract is contained in the *Transactions* (Vol. vi., 1854 and 1855), he (Dr. Peacock) had demonstrated the variations in the capacity of the two orifices by actual measurement. It was, indeed, very rare, even in hearts regarded as healthy, to find the pulmonic and aortic orifices of the same capacity. Ordinarily there was an excess of three or four French lines in the circumference of the pulmonic orifice, and in cases where there was obstruction of long duration to the flow of blood along the branches of the pulmonary artery—as in cases of mitral valvular disease or of chronic bronchitis, and, in some instances, even of acute disease of a similar kind—the difference between the size of the two orifices became much aggravated. As stated by Dr. Williams, not only were the orifice and artery increased in size, but the valves underwent a corresponding enlargement, and hence in mitral valvular disease a loud ringing diastolic sound, which was heard at the base, which was not less characteristic than the systolic murmur heard at the apex. In reference to the second case, he believed that the dilatation of the bronchial tubes originated in different modes in different cases; but where the tubes in one lung were generally very much expanded, he regarded the condition as usually the result of pleuro-pneumonia, which had been imperfectly recovered from, so that the substance of the lung was left permanently condensed and impermeable to air, and consequently when the side expanded, the tubes underwent dilatation. A specimen of this kind was in his possession in the Museum at the Victoria Park Hospital, in which he had no doubt that there had been general pleuro-pneumonia and permanent condensation of the lung tissue, so that the air was no longer able to permeate the substance of the lung, and hence the tubes had become expanded. The lung had been everywhere adherent to the parietes of the chest.

LEGAL INTELLIGENCE.

THE APOTHECARIES' COMPANY AND THE ROYAL COLLEGE OF PHYSICIANS.

VICE-CHANCELLOR'S COURT.

THIS information was filed at the instance of the Apothecaries' Company, for the purpose of restraining the Royal College of Physicians from granting licences to Medical Practitioners purporting to enable them to combine the sale of medicines with their practice. The Apothecaries' Company claimed to have the exclusive right, under the charter granted to them by Henry VIII., to issue licences for the sale of Medicine. The Royal College of Physicians insisted that the late Medical Act had enabled them to issue the licences complained of, and the case now came before the Court, on a demurrer on their behalf to the information.

After hearing counsel on both sides, Vice-Chancellor P. Wood gave the following judgment. We have not seen his observations respecting Scottish Physicians in any other report. He said:—

"The main point upon which the decision of this case turned was the contention—advanced on behalf of the plaintiffs—that when the Legislature, by the Act of 1858, gave certain powers to the College of Physicians with reference to the Licentiates of that body, Parliament thereby stereotyped the status of Licentiates, and took away from the College the power of interfering with it in any way. To ascertain the soundness of this argument, the conditions, under the bye-laws, subject to which Licentiates stood, must

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be considered. The conditions to which Licentiates were subject under the bye-laws were of two characters; first, those which had reference to the selection and the qualifications of candidates—conditions which were of the nature of conditions precedent. Secondly, those having the nature of a condition subsequent, by which a Licentiate who compounded and sold drugs was declared to be subject to disqualification thereby. Now, as to the first class of conditions, no doubt could exist. The College of Physicians might clearly from time to time alter, amend, and vary as it might think fit, the qualifications upon which these Licentiates should be admitted, and the plaintiffs in their corporate capacity would have no right to complain. There then remained the other class of conditions, the conditions subsequent, upon which, no doubt, the gist of the case turned. The Court must consider whether or not the College of Physicians were prevented from altering that. Even if there were some doubt upon this point, it would be questionable whether an injunction should issue; for in a case like this, if doubt existed, the Court would rather leave the plaintiffs to their rights at law. But, after considering the matter, it did not seem to His Honour that there was room for any doubt upon the question. The College of Physicians received their original charter in the reign of Henry VIII. Under that charter, it was beyond a doubt that the whole domain of Medicine was given to them. Either as Physicians or as General Practitioners it was given to them to practise. Not only this, but until the reign of James I., they were without a rival in the field of Medicine. The Physicians having thought fit to pass a bye-law of their own restraining their members from compounding drugs, room was no doubt given for the introduction of the new class of Practitioners—the Apothecaries. From a very humble position—that of mere venders of drugs—they passed, by acquiring a knowledge of the properties of the goods in which they dealt, to the dispensing of those drugs for the purposes of relieving the diseases of those who consulted them. Accordingly, in the reign of James I. the charter of the Apothecaries was granted. Much of what that charter professed to do was of doubtful validity, but there was no necessity in deciding the present case to dwell upon it. It was sufficient for the Court at once to pass to the statute of 1815, the foundation upon which the plaintiffs' rights stood. By that statute various rights and privileges were conferred upon the Apothecaries' Company, and by the 29th section it was in effect enacted that nothing therein contained should affect the privileges of the College of Physicians otherwise than as they were affected by that Act. Now, it had been argued that this saving clause did not preserve to the College of Physicians the right, which undoubtedly up to that time they possessed, of varying their bye-laws. This argument was based upon this further contention. It was said that the Act provides that no one shall practise as an Apothecary without the licence of the Apothecaries' Company, and it is then said that if the College of Physicians were not thereby prevented from abrogating the bye-law now in question, the enactment would be a nullity, because in that case persons would be enabled in fact to act as Apothecaries without the sanction of the Apothecaries' Company. Even stopping here, it was clear that the point was too doubtful a one to enable the Court to interfere by injunction in such a case. But was this contention of the plaintiffs a correct one? There were already persons who could exercise the functions of an Apothecary, or portions of the functions of an Apothecary, who were not thereto authorised by the Apothecaries' Company, and the Act of Parliament could therefore not have the wide scope contended for. Such, for instance, was the case with the Scotch Physician in England; he might act as a General Practitioner, although no licence was granted to him by the Company of Apothecaries. But his Honour, though not called on of necessity to construe this Act, had no hesitation in coming to the conclusion that it did not abrogate the right of the College of Physicians to alter their bye-law by abolishing the condition subsequent which was now in question. There then remained only one other point, and that was, did the Act of 1858 operate to prevent the College of Physicians from taking the course now proposed by them? The argument based upon this statute was this:—That in regulating the affairs of the Medical Profession the Act contained provisions having reference to Licentiates, and it was said that this deprived the College of Physicians of the right of altering the status of Physicians as they stood at the passing of the Act. But the Legislature must be taken to have known that the College of Physicians had the right at the time when it passed the Act, of altering the status of its Licentiates, and having nowhere negatived that right expressly, it must still be considered extant. This exhausted the main points of the plaintiffs' argument. There was a further remark that might be made in this case, viewing it as an information, and that was this, it was extremely difficult to see in what the injury to the public consisted. The only ground suggested was that of injury to those young men who might be induced to rely upon the licences granted by the College of Physicians. Even assuming, however, that the plaintiffs were correct in their view of the want of right in the College of Physicians to grant these licences, it was difficult to see the injury to those receiving them. They were not bound to receive them, and *volenti non fit injuria*. In other minor points the plaintiffs' case seemed open to remark; it was preferable to put it, however, as it could be put, upon the higher ground of the law affecting the case; upon which his Honour, without hesitation, came to the conclusion that the case of the Apothecaries' Company was bad, and that the demurrer must be allowed."

A DEATH-BED GIFT.

In a recent Number an illustration of the law affecting death-bed wills was reported; and since then another, where a deed executed under the false alarm of that event was set aside as invalid. Now, we would direct attention to an example of a death-bed gift, or, as the lawyers describe it, of *donatio mortis causâ*. In this case the plaintiff sued is administrator of a lady who died intestate on the 23rd of March, 1859, after a few days' illness. At that time she was under an engagement to be married to the defendant, and the 23rd day of March had been fixed for the marriage day. On the 21st of March she was taken very ill, and when she saw her Medical adviser afterwards, she told the defendant that she could not live; and about ten o'clock on the day of her death sent for the defendant, when she said, "I am dying, John, give me that paper," meaning a policy of life assurance for £1000 and a deposit note for £400, which she had given to the defendant a few days previously to keep for her. The defendant then brought the policy and note, which he gave to the deceased, who immediately handed them back to the defendant, saying, "These are yours, John, with all I have." In a few hours after she died. About ten days before her death the deceased had given defendant a gold watch with a chain, and she then expressed also a wish that another of her watches should be presented to a niece, and a third watch to another niece. These watches the defendant had, since the death, handed over to the parties; but the remaining property belonging to the deceased, consisting of a diamond ring worth £40, several valuable trinkets of great value, besides the policy and deposit note, the defendant had retained, and refused to deliver up to the plaintiff, who now sued for their recovery.

The case was tried recently before Mr. Justice Blackburn at Guildhall, when it was proved that there had been no delivery by deceased of the two watches, and that the rings still remained in deceased's box at the time of her death. The defendant therefore submitted, on these points, to a verdict for the plaintiff; but as to the policy and deposit note, it was contended for the plaintiff that they had really never passed to the defendant as a *donatio mortis causâ*. Whereupon the learned Judge said he would reserve the point for the Court's consideration *in banco;* but as to the first watch he should leave the jury to say whether they thought it had been given to the defendant some days before the death, and as to the policy and deposit note whether they thought they had been delivered to defendant at a time when the deceased believed she was dying. On each of these questions the jury found for defendant, thus establishing his right to retain the first watch as a gift perfected by actual delivery; but it was left subject to the decision of the Court *in banco* the defendant's right to retain the insurance policy and note for £400. From this short abstract it will be seen that, to constitute a perfect gift, a delivery of the thing given must be actually made; and to effect a *donatio mortis causâ* the deceased must be also in

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articulo mortis when the act is performed. Though no strictly Medical question is involved in the case, it is worthy of being recorded, as Medical witnesses might be the principal referees in any similar case to decide if a patient were really *in articulo mortis* at the time of performing any act.

MEDICAL NEWS.

APPOINTMENT.

MIDDLEMIST.—Mr. R. P. Middlemist has been elected Surgeon to the Royal South London Dispensary.

DEATHS.

ARDAGH.—April 28, Arthur Ardagh, of Lower-crescent, Belfast, M.D., aged 50.

BELLIN.—April 20, John Banks Bellin, of Malpas, Cheshire, L.S.A., aged 57.

CLARK.—April 20, Robert Clark, of Fort Augustus, Inverness, L.F.P.S. Glasg.

FREER.—May 2, at Oakford House, Exeter, John Freer, M.D., aged 75.

MAJOR.—May 3, David Browning Major, of Watling-street, Canterbury, F.R.C.S. Eng. (Hon.), M.R.C.S., L.S.A., aged 59.

MAITLAND.—March 23, at Coonor, East Indies, Dr. John Maitland of the 2nd European Light Infantry.

MARRETT.—May 1, Thomas Charles Marrett, of Cosham, Hants.

REEVES.—April 28, Samuel Reeves, of Salcombe, Kingsbridge, Devonshire, M.R.C.S. Eng., Admiralty Surgeon and Agent.

ROBB.—April 2, at Frederickton, New Brunswick, James Robb, M.D., Professor of Chemistry, Geology, etc., in the University of New Brunswick.

THOMPSON.—May 8, Seth Thompson, M.D. Univ. Edin., F.R.C.P. Lond., of Lower Berkeley-street, Portman-square, formerly Physician to the Middlesex Hospital and the Marlebone Dispensary.

WIGHT.—May 3, at No. 39, Jermyn-street, Robert Wight, late Surgeon-General, Bombay, aged 62.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—At the Comitia Majora, held on Friday, May 3, Charles Osmond Woodford, Calcutta, previously an Extra-Licentiate of the College, was admitted a Member.

At the same Comitia, the following gentlemen, having undergone the necessary Examination, and satisfied the College of their proficiency in the Science and Practice of Medicine and Midwifery, were duly admitted to practise Physic as Licentiates of the College:—

Crutchley, Henry, Market Drayton
Morgan, Herbert Major, Lichfield.

Also, on the 19th of April, Julius St. Thomas Clarke, of Guy's Hospital, passed the first part of the Professional Examination for the Licence of the College; and on the 24th of April the following Candidates for the Licence passed the Preliminary Examination in the subjects of General Education:—

Hudson, Ernest Arthur, 56, Queen Anne-street
Smith, Charles Edward, Coggeshall, Essex.

ROYAL COLLEGE OF SURGEONS (a).—The following gentlemen having undergone the Preliminary Examinations in Classics, Mathematics, and French, were reported to have done so to their satisfaction by the Court of Examiners at its last meeting. and, when eligible, will be admitted to the final Examinations for the Fellowship of the College:—

Name.	Residence.	Membership dated
Streatfield, J. T.	Finsbury-square	June 11, 1852.
Orme, C. E.	St. John's-wood	January 30, 1861
Wolferstan, S.	Middlesex Hospital	

At the same meeting of the Court, Mr. Raymond Harvey Carroll passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the Edinburgh College of Surgeons, his diploma bearing date April 1854.

The following gentlemen having undergone the necessary Examinations for the Diploma were admitted Members of the College at meetings of the Court of Examiners on the 30th of April and the 1st of May:—

(a) This College is the only one which does not send lists of New Members to the Medical Journals.—Hence frequent mistakes, for which the Journals are not responsible.

Appleyard, J., Cleethorpes, near Grimsby, Lincolnshire
Axham, F. W., Bideford, Devon
Beddard, J., Dudley, Worcestershire
Begg, the Rev. W., Poonah, near Bombay
Brumwell, J. R., Burnley, Lancashire
Caudle, A. W. W., Henfield, Sussex
Clarke, E. G., Pontardulais, Llanelly, Carmarthen
Dunlop, R., Drumhead, Dumbartonshire
Eddowes, W., Pontesbury, Salop
Ellery, R., St. Stephen's-by-Saltash, Cornwall
Greaves, C. H., Great Easton, Leicestershire
Greene, F. W., Upton-park, Slough
Greene, J. A., Calcutta
Grenfell, H., St. Just, Cornwall
Griffiths, W. H., Llangeler, Carmarthen
Haswell, N. R., Falmouth
Hodson, T., Cocking, Sussex
Holt, G. C., Biddulph, Staffordshire
Holmestead, T., Bocking, Essex
Hutchings, H. E., Dorchester
Jones, E., Dolgelly, Merionethshire
Jones, M., Aberystwith
Kidd, H. A.
Lawrence, F. G., Cambridge
Leeds, E., Oxon, Stretford, near Manchester
Martin, H. A., St. Austel, Cornwall
Minns, P. R. J. B., Nassau, New Providence
Peel, R., Durham
Pocock, C. J., Brighton
Pole, A., Shetland
Rawson, E., Kirkstall, near Leeds
Roper, A., Aylsham, Norfolk
Sealy, G. J., Marazion, nr. Penzance
Soper, W., Percy-place, Clapham-road
Smith, J. De, Cape of Good Hope
Stamper, J. F., Haverfordwest
Tanner, R., Ledbury, Herefordshire

UNIVERSITY OF GLASGOW.—The following degrees were conferred on April 24, 1861:—

DOCTORS OF MEDICINE.

Agnew, David, Scotland
Aitken, James M., Scotland
Alston, James, Scotland
Baker, John C., England
Cassells, Thomas, Scotland
Christie, James, Scotland
Chalmers, William, Scotland
Crawford, James, Scotland
Drysdale, John, Scotland
Farley, George C., England
Finlay, James, Scotland
Gaff, James D., Scotland
Grieve, Robert, Scotland
Hannah, John B., England
Kerr, Norman, Scotland
Lawrie, James, Scotland
Marshall, John, Scotland
Marshall, William, America
Mackintosh, Angus, Scotland
Mather, George R., Scotland
Macaw, Kennedy, Ireland
M'Cartney, James, Ireland
M'Neely, Hugh, Ireland
Miller, Hugh, Scotland
Murray, John, M.A., Scotland
Robertson, George, Scotland
Scott, Frederick B., England
Schmidl, Marcus M., Austria
Scowcroft, James P., England
Smellie, James, Scotland
Smith, Thomas J., England
Somerville, John, Scotland
Whitelaw, William, Scotland

MASTERS IN SURGERY.

Cassells, Thomas, Scotland
Farley, George C., England
Finlay, James, Scotland
Gaff, James D., Scotland
Mackintosh, Alex. J., Scotland
M'Nab, Duncan, Scotland
M'Neely, Hugh, Ireland
Scott, Frederick B., England
Smith, Thomas J., England.

F.R.S.—There were forty-eight candidates for the three letters this year; the Council recommend fifteen gentlemen for election—namely, Mr. C. S. Bate, Mr. H. Debus, Mr. C. De Morgan, Mr. T. A. Hirst, Mr. A. Matthiessen, Mr. J. C. Maxwell, Mr. F. Muller, Mr. W. Newmarch, Dr. E. A. Parkes, Mr. W. Pole, Mr. P. L. Sclater, Captain C. F. A. Shadwell, Mr. H. J. S. Smith, Dr. W. Stokes, and Mr. G. J. Stoney.

IMPROVED LUNAR CAUSTIC.—We have seen and tried a specimen of nitrate of silver prepared in sticks by Mr. Mumford, of Bathurst-street, at the suggestion of Dr. Walter Bryant, which has the great advantage of being free from the brittle fracture of ordinary nitrate of silver. It is hard, may be scraped to a very fine point, and thus becomes very safe and economical in use.

HER MAJESTY'S LEVÉE.—At the Levée last Saturday the following gentlemen were presented:—Deputy-Inspector-General W. C. Maclean, M.D., on return from India, and on appointment as Professor of Military Medicine in the Army Medical School, Chatham, by Major-General Y. Campbell; Dr. Muir, C.B., Inspector-General of Hospitals, by H.R.H. Duke of Cambridge; Dr. Paul, by Lieut.-Col. Money. The following Medical men attended:—Doctors: Forbes Winslow, Waller Lewis, Edward Meryon, Ferguson, Breslin, Ruttledge, Pickford, Granville. Surgeon M'Swiney (Royal Navy).

UNIVERSITY COLLEGE, LONDON.—Professor Ellis has been appointed Examiner for the Atkinson Morley Surgical Scholarship, jointly with the permanent Examiners—viz., the Professor of Clinical Surgery, the Professor of Surgery, and the Professor of Ophthalmic Surgery, and Mr. Marshall was appointed Substitute Examiner. Mr. Charlton Bastian and Mr. William John Smith having obtained from the Faculty certificates of the competency of their knowledge of Anatomy, Physiology, Chemistry, and Medicine, were admitted candidates for the Scholarships; May 10 was fixed for the commencement of the examination. On the recommendation of the Senate the Council determined that henceforth the Professor-

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ship of Physiology (now held by Dr. Sharpey) should be attached to the Faculty of Arts, as well as to the Faculty of Medicine.

AN OLD CATHARTIC REVIVED.—The leaves of the *Globularia Alyssum*, which were known in the middle ages as a purgative, have been recently re-introduced by Dr. Planchon, of Montpelier, who claims for them that they are efficient as a purgative, without producing nausea or griping, and that their bitter properties give them a tonic action.

THE SALE OF NOSTRUMS IN AMERICA.—A Correspondent of the Boston *Medical Journal* says that there has been within the past few years an immense increase in the sale of patent medicines, and that forty per cent. of the items, which make up the orders sent for drugs, are for such articles. The price current list shows that the number of quack medicines in demand is between five and six hundred. It is not uncommon for those who deal in them largely and exclusively, to make purchases of a single article at one time to the amount of 10,000 dollars. Notwithstanding the great success of some adventurers, the business is an extremley hazardous and precarious one. The cost of winning public attention and creating a demand is very great and usually exceeds the profits. Where one like Ayer, Brandreth, or Townsend succeeds, hundreds are driven into bankruptcy.

WESTERN MEDICAL AND SURGICAL SOCIETY.—The annual meeting was held on the evening of May 3, L. G. Cumberbatch, Esq., V.P., in the chair, when the following Officers were elected for the Session 1861-1862:—*President*, Dr. Seaton; *Vice-Presidents*, Dr. Fincham, Mr. Leggatt, Mr. Cumberbatch; *Council*, Mr. World, Dr. Marcet, Dr. Barclay, Mr. Scannell, Dr. Cahill, Mr. Pollock, Dr. C. G. Brown, Dr. Anstie, Dr. Stacpoole, Dr. Love, Mr. Bannister, Mr. C. Hunter; *Honorary Secretaries*, Dr. Baines, Mr. Milner; *Treasurer*, Dr. Seaton; *Honorary Librarian*, Mr. T. Dickinson; *Auditors*, Mr. F. W. Pettigrew, Mr. Godwin. The Report of the Council and Auditors were read and adopted. After the usual vote of thanks to the Retiring Officers for their past services, Mr. Barnes exhibited the stomach of a patient who destroyed himself by taking six drachms of essential oil of bitter almonds and six drachms of tincture of opium. He narrated the particulars, and remarked upon the congested appearance of the mucous membrane at the cardiac extremity of the stomach. No congestion was found elsewhere.

QUEEN'S COLLEGE, BIRMINGHAM.—At a meeting of the Professors, held on Saturday last, Professor Postgate proposed that the Professors should pay, as a body, a graceful and lasting compliment to the Dean of the Faculty, William Sands Cox, Esq., F.R.S. Mr. Postgate observed that Mr. Cox was an earnest man, who had struggled, and was struggling, to overcome difficulties of no ordinary nature, for the benefit of that town and district; and he believed the course he had taken lately with regard to the liabilities of the College would obtain the sympathy of every honest man in the neighbourhood. He was, therefore, anxious the Professors should evince their respect and esteem for Mr. Cox and his exertions, and prove to the town that unanimity prevails among the body. Professor Postgate's proposition was cordially received by the Professors, but declined by the Dean of the Faculty; at the same time, "he felt deeply the kind approval of his colleagues of the course he had taken, but that until the College debts were paid, and which were contracted by others, and the College again placed in smooth water, any recognition of his humble efforts would be premature."

GOOD AND BAD SPIRITS.—"Good spirits," said Dr. Druitt, in an excellent lecture delivered for the Ladies' Sanitary Association, "are the faculties possessed by hopeful, self-satisfied, wide awake, energetic, brave men,—the men who are not easily rebuffed, and who have the knack of keeping their heads above water, and always falling, as the vulgar say, on their legs. Bad spirits, on the other hand, may consist in an utter stagnation of mind and want of ideas, or else in a state of mind which views everything in a low, hopeless, miserable way. Such are the thoughts of men who are nervous, who do not trust themselves nor believe in themselves,—who are afraid of every effort,—who always look at the worst side of things,—who are apt to view the most trifling circumstances as 'intentional insults,' who are irritable, touchy and quarrelsome, who can not shake off griefs or unpleasant impressions, but go on brooding over them. Between melancholy views of real matter of fact, and that state of mind which suggests positively unreal ideas of a noxious and injurious cast, and hypochondriasis and hallucinations, there are infinite steps and stages, but they are all of one family. Whence then come good spirits?—From abundant nourishing food, pure air, sunlight, and above all from the satisfaction derived from the daily honest discharge of the duties of ordinary life; from a pure conscience; from such an education as gives power of taking pleasure in objects of art, or natural history, or works of imagination. The mind must be stored with agreeable ideas, and these must be stirred up and renewed from time to time. And whence come bad spirits?—From causes both physical and moral. Some people are born with brains naturally weak; but any kind of bodily weakness is liable to be attended with defective energy of the brain in supplying a good flow of thought. When the blood gets impure, poor and pale; when food is deficient or of bad quality—('Hungry and thirsty, their soul fainted within them,' says the Hebrew poet,)—when the stomach is irritable, and does its duties slowly and painfully, and when the skin is dirty. It is well observed by Mr. Urquhart, that no man can be altogether responsible for the state of his liver, but that his skin is under his own control, and that there can be no excuse for an uncleanly state of it. Few things cause greater exhilaration of mind than the feeling of a healthy glow after the use of the bath and towel. Then there are the moral causes. Want of occupation is one,—*ennui*, the French call it,—when the mind does not present a succession of agreeable images of its own accord, and when there is nothing to excite them. This state of mind is quite intolerable, more painful by far than bodily anguish. Very few men, indeed, have ever destroyed themselves to escape from bodily pain, although they may be racked with it for years, but numbers destroy themselves to escape from *ennui*, or the painful sensations arising from an unoccupied mind."

BOOKS RECEIVED.

Human Physiology. By J. C. Dalton, M.D. Second Edition. Philadelphia: 1861.

Transactions of the American Medical Association. Vol. XIII. Philadelphia: 1860.

Méthode Pratique de Laryngoscopie. Par le Dr. L. Türck. Paris: 1861.

The Origin, Nature, and History of Wine. By C. Ellis. London: 1861.

The Cottage System and Gheel. By J. Sibbald, M.D. London: 1861.

The Legal Relations of Insanity. By D. Skae, M.D. Edinburgh: 1861.

A Treatise on Dental Surgery. By A. Eskell. London: 1861.

The Bath Mineral Waters. By R. W. Falconer, M.D. London: 1861.

Obstetric Aphorisms. Second Edition. By J. G. Swayne, M.D. London: 1861.

The Climate of Egypt. By D. Dalrymple, M.D. London: 1861.

Analytical Tables. By M. Thompson, M.D. Edinburgh: 1861.

Surgical Diseases of Women. By I. B. Brown, F.R.C.S. Second Edition. London: 1861.

Third Annual Report of the Commissioners in Lunacy for Scotland. Edinburgh: 1861.

Our Domestic Animals in Health and Disease. By J. Gamgee. Edinburgh: 1861.

Operative Surgery. Part II. By C. F. Maunder, F.R.C.S. London: 1861.

VITAL STATISTICS OF LONDON.

Week ending Saturday, May 4, 1861.

BIRTHS.

Births of Boys, 951; Girls, 1057; Total, 2008.

Average of 10 corresponding weeks, 1851-60, 1717·4.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	652	609	1261
Average of the ten years 1851-60	563·8	545·5	1109·3
Average corrected to increased population..	..	..	1220
Deaths of people above 90	..	2	2
Deaths in 15 General Hospitals	47	24	71

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DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1851.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	376,427	1	10	6	1	21	4	2
North ..	490,396	3	8	5	2	23	10	2
Central ..	393,256	..	5	5	1	16	2	4
East	485,522	1	1	1	3	19	4	7
South ..	616,635	3	6	9	..	47	9	1
Total.. ..	2,362,236	8	30	25	8	124	29	16

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	30·026 in.
Mean temperature	46·3
Highest point of thermometer	64
Lowest point of thermometer	29·1
Mean dew-point temperature	38·5
General direction of wind	N. & N.W.
Whole amount of rain in the week	0·13 in.

Medical Times and Gazette.

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NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

We cannot insert any communication received from an anonymous correspondent.

Mr. Hughes's letter arrived too late for insertion this week.

A Subscriber cannot enter Army, Navy, or Indian Medical Service at the age he names. The extreme limit is twenty-six years.

Dr. W. Stuart Munro.—"W. A., Mr. Hamilton, 5, Park-street, Boroughmarke, London.

Dr. Robert Lee's reply to Dr. Druitt has been delayed by an accident until next week.

R. T. H.—The "Scale of Medicines for the Merchant Service," etc., published by Mr. Churchill.

Dr. Corfe's Paper on Fatty Degeneration shall be inserted as soon as possible.

Mr. Bulley's Cases will appear in an early number.

Dr. Mayne.—We cannot conceive any combination of circumstances which would justify the publication of a letter sent to the Editor of any Journal as "Private and Confidential."

No communication will be inserted from *Dr. Hildige* for the future without a distinct assurance that it has not been sent to any other Journal.

A Student.—We do not see any possible relation between the effects of marriage with a cousin and with a deceased wife's sister, unless the sisters were cousins of the husband. Professor Morris clearly means cousins who are the offspring of parents who were cousins.

Dr., R. N.—Inquiry shall be made as to the reason why the F.R.C.S. is removed from after the names of all the Fellows in the Navy List of April last. The letters had appeared for years previously, and we do not know what the College of Surgeons has done to offend the Admiralty.

The Report of the Obstetrical Society is unavoidably delayed until next week. It would be a great convenience if the copy could be supplied earlier to the Printers.

Castor-oil Bread.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The difficulty of taking castor-oil, when but a mild effect of it is wanted on the bowels, may be removed by kneading, etc., bread, with it, instead of butter or lard. Bread made with it will be found quite as good to the taste, if made with fine castor oil, or finer than with butter, etc.

Gateshead, May 2. I am, &c. Jos. Bell.

Scarlatina and Diphtheria.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Perhaps the following cases may be of interest to some of your readers, as bearing on the connexion between scarlatina and diphtheria, and the infectious nature of the latter.

Three children, in the same family, had scarlatina; during the third week from the seisure of the first, the mother had a severe attack of diphtheria. Within a month of her convalescence, the nursemaid (who had scarlatina at the same time as the children) went home (a distance of three miles) for a holiday, and in two days was taken with diphtheria. About ten days after she was well, two of her younger sisters were attacked with it and died. A day or two after their death, the mother was attacked and recovered; before she was quite well her son, aged four, had scarlatina.

I am, &c.

Revesby, May 4. Hugh Gilmour, M.R.C.S.

COMMUNICATIONS have been received from:—

Professor Simpson; M. Claude Bernard: Dr. Robert Lee; The Professors of University College; The President and Council of the Pharmaceutical Society; Mr. Bell; Dr. Weber; Dr. Mayne; Mr. Head; Mr. Hine; Mr. J. Gamgee; Mr. Hughes; Registrar-General; Dr. Halford; Dr. Wilde; Mr. Soelberg Wells; Dr. Corfe; Mr. Bulley; Mr. Cross; and Dr. R. D. Thomson.

APPOINTMENTS FOR THE WEEK.

May 11. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

Royal Institution, 3 p.m. Max Müller, Esq., "On the Science of Language."

Royal Society, 9 p.m. Sir B. Brodie's Soirée.

13. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

University College, 3 p.m. Soirée.

14. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

Royal Institution, 3 p.m. Mr. John Hullah "On the History of Modern Music."

Royal Medical and Chirurgical Society, 8½ p.m. Dr. Waters, of Liverpool, "On Asphyxia, and on the Use of the Hot Bath in Suspended Animation." Dr. H. Weber "On Disease of the Pons Varolii."

Pharmaceutical Society, 8½ p.m. Conversazione.

15. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

Ethnological Society. Annual General Meeting, 4 p.m. M. du Chaillu "On the Races of Man in Africa, from Observations during a Residence of Four Years," 8½ p.m.

16. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.

Royal Institution, 3 p.m. Mr. Pengelly "On the Devonian Age of the World."

Harvkian Society of London, 8 p.m. Dr. Toulmin "On the Pathology of Cholera, and the Causes which necessarily render all Medicines inactive in that Disease."

17. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

Royal Institution, 3 p.m. Professor J. Clerk Maxwell "On the Theory of Three Primary Colours."

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No. 1, 2, 3, is J. Alderman's Patent

Graduating Elastic Spinal and General Invalid Couch, which is fitted up with two, three, or four distinct graduating actions, so that an Invalid can be adjusted imperceptibly to any position without being touched by the nurse, and free from all pressure, that being avoided by his Elastic Ventilating Mattress and his Patent Elastic Adjusting Foundation, so that a patient cannot become bedsore by long confinement.

No. 4, 4, 4, is J. A.'s improved Spinal and General Invalid Couch and Carriage. The Couch has three distinct movements, so that a patient can be placed in any position; it has also a Shifting Stand for the room, upon large easy castors, so that the Invalid can be lifted with the couch from its stand, placed upon the Carriage, and go out for an airing when required, without being touched.

No. 5, 5, is J. A.'s Patent Graduating Elastic Self-adjusting Invalid Chair. This Chair, like the Couch, is made to follow Nature in every respect, as the back, the arms, the seat, and the leg-rest are made to work at the same time, so that not a muscle of the patient need be disturbed. The arms are also made to put on and off in an instant, so that the patient can get on and off from either side while the leg-rest is out.

No. 6 is J. A.'s improved Self-propelling Chair, which renders an Invalid perfectly independent, being able to run from room to room without any assistance.

J. ALDERMAN, 16, Soho Square,

LONDON.

No. 7 is J. A.'s improved Exercising

Horse, which he fits upon a variety of ways, so as to give any amount of exercise.

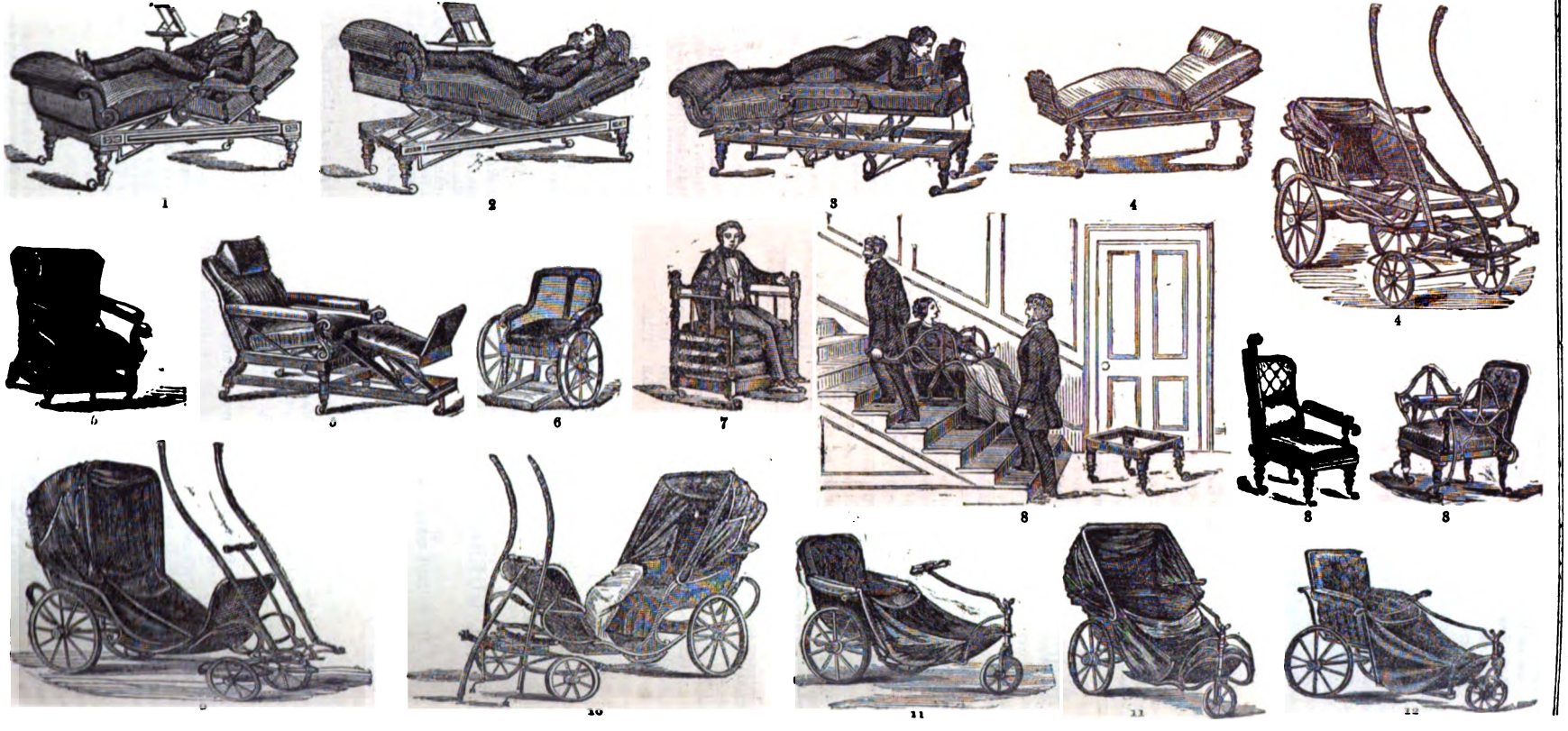
No. 8, 8, 8, is J. A.'s Patent Portable Equilibrium Carrying Chair, which enables an Invalid, however weighty, to be carried up and down stairs with perfect ease and safety; the Chair always adjusting itself, enables the two persons who carry to walk up and down stairs in the usual way, quite erect, with their arms straight down, which avoids any strain upon their muscles. It is also a perfect Easy Chair for the patient to sit in during the day, the carrying handles being made to hook on and off in an instant.

No. 9 is J. A.'s improved Four-wheel Albert Chair, fitted for hand or pony. The body is mounted upon C and under springs behind, and elliptic springs in front, so that it makes a most elegant and easy Carriage, free from all oscillation.

No. 10 is J. A.'s improved Four-wheel Brighton Chair, which is mounted upon C and under springs both back and front, together with his new wrought-iron perches or cranes, instead of the old-fashioned wood perches. It is also fitted for hand or pony, and is the most elegant and easy Carriage in use.

No. 11, 11, is J. A.'s improved Three-wheel Albert Chair, with and without a hood. It is elegant and easy.

No. 12 is J. A.'s improved Three-wheel Garden or Bath Chair, with or without a hood.



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ORIGINAL LECTURES.

CLINICAL LECTURES
ON
THE DISEASES OF WOMEN.

By J. Y. SIMPSON, M.D., F.R.S.E.
Professor of Medicine and Midwifery in the University of Edinburgh.

Lecture XXXVIII.

ON AMENORRHŒA—ITS CONSTITUTIONAL, &c. TREATMENT.

Gentlemen,—I trust that what I have already said with regard to amenorrhœa has been sufficient to enable you to understand the nature of the disease and to guide you in recognising the forms of it that may hereafter come under your observation. How you may treat the disease with most hope of success I am now to endeavour to explain to you. But before doing so, allow me to remind you that there are many cases of amenorrhœa where the mere absence of the menses cannot be regarded as morbid, and where, consequently, it requires no kind of Medical interference. You will, in practice, often be consulted by anxious and alarmed mothers because the monthly discharge has not begun to appear in one or other of their daughters at the usual age. Their fears you can quiet by the assurance that time alone will cure them, and that there is no necessity for either fear or haste if their health is otherwise good. Again, women of say forty to forty-five years of age will sometimes complain of the premature cessation of the catamenia, though the amenorrhœa is neither the result nor the cause of any morbid condition. In these cases the employment of measures calculated to restore the flow is, of course, not followed by any useful or happy result. In the vast majority of instances, however, you will be obliged to put in practice some course of treatment which may be described as of a threefold character, according as it is calculated to relieve or remedy the attendant symptoms;—1. *Symptomatic* or *Palliative*,—or intended to restore the patient's system to the normal standard of health; 2. *Systematic* or *Constitutional*,—or directed specially towards the uterine system, with the view of recalling the suppressed discharge; 3. *Specific;* or, 4. *Local*, and consisting of means applied to the uterus itself.

A. Symptomatic Treatment.

Many of the secondary symptoms which arise in connexion with suppression of the menses are of too slight a character to call for any special treatment, and most of them will disappear during the course of a skilfully and successfully directed plan of specific or local treatment. But some of these symptoms may be occasionally of such a severe and distressing nature as to demand some kind of immediate palliative treatment. Thus you may sometimes be called upon to administer some remedy for the—

1. *Relief of the Attendant Asthma.*—There are various means that you may employ for the relief of this very rare, but distressing complication. Of these, perhaps, the readiest and most immediate, is the inhalation of chloroform. When you use chloroform in the uterine, as in the other forms of asthma, you do in general not require to produce with it any deep degree of anæsthesia. A few drops breathed from the palm of the hand may suffice, and may be repeated several times if necessary, till the dyspnœa is subdued. The patient can be taught to administer the vapour to herself in this manner without incurring any risk, for dyspnœa, coughing, etc. Occasionally, however, you require to exhibit a much deeper and larger dose before the asthmatic paroxysm is subdued. Again, I have often seen patients suffering from different forms of asthma greatly relieved, and sometimes completely cured of their attacks by being made to breathe carbonic acid gas, developed in an ordinary beer bottle, from a mixture of equal parts by measure of crystallised bicarbonate of soda and tartaric acid with about a tumbler full of water, and inhaled through an india-rubber tube, or through a narrow opening in the cork. Our druggists sell a small inhalation apparatus for the purpose exactly resembling that which I have already described and shown to you (see Lecture IV.), as used for the anæsthetic application of carbonic acid in cancer and neuralgia of the uterus. When inhaled by this apparatus probably not more than five to ten per cent. of carbonic acid mixed with common air is breathed. But the anæsthetic effect of the gas in some cases of asthma and irritable cough is very striking. Iodide of potassium, which, when administered in doses of five grains or more three or four times a-day, proves sometimes such an effectual and almost specific cure for asthma, is of but little value, so far as I have had occasion to observe its action, in the amenorrhœal form of the disease. A more certain cure for any special attack is to be found in the application of leeches either over the top of the sternum, or to the pelvic region. But the repeated application of leeches is attended with too much depletion and deterioration of the patient's health to permit of our having recourse to such a remedy on the occasion of every attack of dyspnœa in a woman whose constitution, it may be, is already below par. The effect of the bleeding, moreover, although almost always certain, is only temporary; and therefore for the action of the leeches, there may advantageously be substituted that of two or three dry cups placed over the chest, behind, or over the sacrum. All these measures, however, afford merely temporary relief; and unless some of these direct measures applied to the uterus itself, of which I shall speak anon, for the restoration of the menstrual discharge be put in practice, you may expect with almost absolute certainty, that at the return of the next or of some subsequent monthly period there will be a recurrence of the asthma.

2. *Cure of the Neuralgia.*—Pains under the left mamma, in the intercostal spaces, in the sacral region, or in the temples, are, as I have stated to you, among the most constant and clamant symptoms seen in connexion with amenorrhœa. To relieve them you may administer some of the various narcotics—a practice, however, that may lead the patient into dangerous habits, and which, therefore, I would earnestly counsel you, as much as possible, to avoid. The use of small doses of arsenic—two drops of Fowler's solution thrice a-day—will be of more ultimate benefit to your patient, although not so immediately effectual. Where there is any indication of a rheumatic taint of constitution, you will probably find more satisfactory results from the administration of thirty or forty drops of the tincture of actea racemosa three or four times daily in a little water. Locally, the application of sedative and anæsthetic liniments and plasters occasionally decreases or removes these neuralgic pains. Perhaps the most rapid relief you can give your patient will be by the subcutaneous injection of a watery solution of morphia. She will point to an undefined space, say, in the side, as the seat of pain; but if you press carefully with the finger at different spots, you will succeed in touching a point, in most cases immediately under one of the ribs, where pressure causes more acute suffering. If you adopt Dr. Wood's plan of thrusting a fine-pointed syringe through the skin at this spot, and then inject ten or twenty drops of a watery solution of the bimeconate of morphia, equalling the ordinary strength of laudanum, you will in some cases succeed in relieving the pain at once; and if it does return, it will probably be in another nerve, or in another part of the same nerve, whence a repetition of the narcotic injection may possibly again expel it. Latterly, in this subcutaneous injection of morphia I have usually contented myself by sending the anodyne into any spot at the pained part without trying to search out for the purpose the supposed site of the principal branch of the neuralgic nerve. In some cases the remedy perfectly succeeds; in others it perfectly fails. And when it does fortunately succeed, the wonder is, not that it acts as a temporary local anæsthetic merely, but that occasionally the pain does not return again after the effect of the opiate has passed away. One of the first cases in which I ever tried this subcutaneous injection was in this respect one of the most successful which I have ever met with. The patient, a young Australian lady, had been suffering severely from the limited pain so often attendant upon deranged uterine health for two years. Many means, I was told, had been tried for its removal, but all in vain. I injected a few drops of a solution of bimeconate of morphia into the pained part. In five minutes the pain was gone, and has never, I believe, in any degree returned. It had much more the speed and brilliancy of a Surgical than of a Medical cure. But such instances are rare, very rare. And when you do use this subcutaneous injection, remember to warn your patients that

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sickness and vomiting may follow. Otherwise they may be alarmed by the supervention of these symptoms. The neuralgic headaches which are sometimes so distressing to the patient in cases of amenorrhœa are usually most effectually relieved by the aid of heat, applied by means of a sponge squeezed out of hot water, or otherwise. Patients discover this for themselves; and you will sometimes find them applying mustard or turpentine to the forehead to relieve the deeper pain. In cases where the headaches have become of a chronic character, and of constant continuance, I have found the most admirable result from the use of nickel, administered in the form of the sulphate or phosphate, in doses of half a grain or a grain three times a-day.

3. *Removal of the Eruptions.*—It holds good with regard to the acne that is wont in some cases to appear each month, perhaps more distinctly than with respect to any of the other secondary symptoms arising from suppression of the menses, that the secondary disease disappears at once when the menstrual discharge is restored. But, in a few cases, it still lingers on, and sometimes the disfigurement is very distressing to the patient, so that you may be called upon to make some direct application to the affected part. The application which I have found most useful in these cases of chronic catamenial acne is the oil or butter of antimony. This is usually said to be a powerful caustic; but if you apply it to the skin with a brush, and neutralize it speedily with some bicarbonate of soda, you will find that it causes almost no pain, and is not followed by any violent effect. What the explanation of its action may be in cases of acne I am not prepared to state; but certainly when applied in the way I have described every two or three days for a week or two, it has usually a very wonderful effect in causing the disappearance of the eruption. If after being employed for a time, it should appear to be losing its effect, it use should be interrupted, and applications should be made alternately of citrine or some other mercurial ointment, and of some of the preparations of iodine. Most of the preparations of this last drug, labour under the disadvantage of producing a discolouration of the skin, which renders their application to exposed parts always somewhat repulsive to the patient. But my friend Dr. Arkwright, of Accrington, has recently brought under my notice a preparation which seems to possess all the activity of the tincture of iodine, and which is quite colourless, so that it may be applied to the face or painted over strumous glands in the neck, without any discomfort to the patient. It is composed of one part of the ordinary compound tincture of iodine of the London Pharmacopœia, and two parts of the milder aqua ammonia. This mixture, which is at first brown, but after standing for forty or fifty hours, becomes quite clear and colourless, may be applied to the skin two or three times a-day for a lengthened period, without producing any of the pain or excoriation which attend the prolonged use of the ordinary tincture, and in obstinate cases of chronic acne it forms an admirable adjuvant to the other remedies of which I have spoken. As a local application, Rumex ointment often answers well; and if the eruption is very irritable, bismuth or cucumber ointment, with the addition of a drachm of officinal prussic acid to each ounce of these ointments. Along with these external applications, however, it is often advisable to combine the internal administration of small doses of arsenic.

B. Systematic or Constitutional Treatment.

I have already stated to you that patients suffering from amenorrhœa may be either in a state of plethora or of anæmia. In either case they deviate from the normal standard of health. Your leading indication is to bring them back to the standard of health, and to fulfil this object you require for their restoration two different courses of treatment. The plethoric patient is to be subjected to a lowering system of treatment; leeches, perhaps, being applied occasionally in the region of the pelvis; mild saline laxatives being from time to time administered; diminution of diet being recommended, and abundant open-air exercise enforced. In cases of anæmia or chlorosis, on the other hand, the patient requires to be stimulated and fed up. You then administer the various tonics, and enjoin the use of a liberal diet; in all cases, however, having special regard to the state of the stomach; for many of these patients, as you know, suffer sadly from dyspepsia, and to throw in a number of strengthening drugs and a [illegible]y of stimulating food into a stomach incapable of digesting and assimilating them, would only be to increase the mischief which you are anxious to remove and remedy. The tonics that have in such cases been found most serviceable, are those derived from the mineral kingdom, such as iron, manganese, zinc, arsenic, etc.; and, sometimes you will find that, as in the laws regulating the use of diuretics, they will produce the desired effect more certainly when two or more of them are given combined together at once, than when one of them is administered separately. The phosphates of the first three metals I have named are, perhaps, at present, the preparations most in fashion, and they may be given either in the form of pills, or of the various syrups which are now to be had of all our principal chemists. It is a matter of so much importance to restore the patient to the normal standard of health, and some of these tonics, and more particularly the ferruginous preparations, have been found so serviceable in fulfilling this indication, that they have come to be regarded in the light of actual emmenagogues, and may be discussed as such.

C. Specific Treatment.

Infusions and other preparations of rue, myrrh, savine, and other herbs were at one time much administered, under the belief that they were possessed of some special power of acting on the uterus and restoring its suspended function in cases of amenorrhœa; and ergot of rye, strychnia, etc., are still used with the same object. It is extremely doubtful whether these or any other drugs are possessed of any such specific properties. I see it stated in a recent number of one of the Journals that the Japanese are supposed to have an infallible remedy for the cure of amenorrhœa; but from our experience here, I think we may be allowed to doubt whether even in Japan there exists a drug of such specific power—the effect of most of our supposed emmenagogues being due, as I have just stated, to their invigorating action on the general system. But, whatever be their *modus operandi*, some of them have so often proved useful in practice, that you will feel yourself in almost every case bound to make trial of them for a length of time before having recourse to the employment of any more direct local remedies; and even after they have been administered without any specific effect for some months, and you have found it necessary to resort to some local measure, you may still make your patient continue to use—

1. *Emmenagogues.*—If you poll the Profession, you will find that the remedy most widely relied on for the cure of amenorrhœa is iron, in one or other of its forms and preparations, given either alone or in combination with some other tonic, rather than with any of the so-called emmenagogues. Great faith has been and is entertained of its virtues in such cases by many of the ablest members of our Profession. The late Dr. Marshall Hall, for example, used to speak of the combination of aloes and iron as being as certain a cure for amenorrhœa as quinine is for ague. The cases in which it is especially useful are those where the patient is in a chlorotic condition. When a patient consults you, and asks for a remedy for stoppage of "the courses," and you see that she is sickly and weak; when you look at her buccal mucous membrane and find it of a pale rather than of a red and healthy hue; when she suffers from œdema of the lower extremities; when she is subject to palpitations, and you can detect anæmic bruits in the heart and large blood-vessels,—then you would certainly prescribe some preparation of iron, and continue its administration for many months. If you ask me in what form the iron ought in such a case to be given, I should say that it is perhaps a matter of little moment what particular preparation you employ, so long as the metal gets assimilated and goes to improve the condition of the blood. Quevenne has shown that all the salts of iron have the property of increasing the quantity of hæmatin in the circulating fluid—all, with the exception of the cyanides, which are passed off unaltered by the kidneys; and perhaps the point in regard to which you would be most liable to error would be in regarding the quantity of any of the salts of iron put into the patient's stomach as a measure of the amount of the drug actually absorbed and assimilated by the patient's system. A limited quantity only of what you administer will be received into the economy. The excess is carried off usually in the intestinal evacuations; and you must always guard against prescribing iron in such doses as to overload the digestive canal and impede its functional activity. Most Practitioners get into the habit, after a time, of prescribing the same preparation of

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iron in all these cases, and I find that the preparation which is most frequently ordered by the members of our Profession in this city is the saccharine carbonate—usually administered in the form of one or two five-grain pills three times a-day. Then there is the compound pill of sulphate of iron and aloes, which is very much used, and which has this advantage over the other, that the constipating effects of the iron is counteracted by the aloes, and it is thus less likely to produce any intestinal disturbance. Or you may prescribe the citrate or lactate, alone, or in combination with myrrh, or quinine, or some gentle aperient, according to circumstances. Or you may have recourse to the old tincture of the muriate, or Griffith's mixture, or to steel wine, or, in short, to any of the preparations, officinal or other, that may seem most suitable in any particular case. The multiplicity of these ferruginous preparations, and the reputed value of so many of them, only serve to show that in whatever form iron can be introduced into the system it will be found of use; and I believe that with this, as with many other remedies, what you should direct your attention to is to administer the drug in a form that will be as agreeable—or, at all events, as little repulsive as possible—to your patient. You remember the famous injunction of Celsus, to cure our patients quickly, safely, and pleasantly. The *cite* and the *tuto* we have probably always more or less in our minds; but I fear that in regard to the administration of drugs the *jucunde* is too rarely remembered and carried out. Most of our mixtures are sadly nauseous, and you will find it difficult to administer iron in any draught that a patient can swallow without repugnance. The phosphatic syrups are certainly an immense improvement on the other ferruginous mixtures, but you will meet with patients who are apt to rebel even against them. Perhaps iron will be most readily and regularly taken when you administer it in the form of a pill; and it is as effectual when given in this as in any other form, for Quevenne has distinctly shown that the degree of solubility of any of the salts of iron in water out of the body is no measure of the extent to which the drug may be absorbed and assimilated by the system. But the ordinary black pill is such a repulsive object to many people; and some patients, and particularly such females as those who are suffering from the disease under discussion, have such an unaccountable difficulty in getting them swallowed, that it becomes a matter of some importance for you to know how to render them somewhat less objectionable. And you must not suppose that this is a mere question of taste or caprice; for the fact is, your patient will be deprived of an excuse that is often pleaded for not taking her medicine, if you can render it palatable to her, and, moreover, she will be far more attentive to your instructions, and take your medicines more willingly and more readily, when she sees you so considerate as to order them in an agreeable form. To the small dose, and the pleasant preparation of the homœopathic practitioner is due, in a great degree, the favour he has obtained with a certain class of the public, and there is no good reason why we should punish our patients more than he does, or compel them to take abominable compounds where simpler and more palatable forms of the remedy would be equally efficacious. The bitter taste of most pills is, perhaps, their chief objection, and to conceal this you may order them to be coated with silver. There are but few patients who would find any difficulty in swallowing a silver-coated pill three times a day; but many object to the coating on the score of its expense—for the silvering of pills costs twopence a dozen—and they ask if there is no cheaper way of hiding the taste. When tolu is dissolved in chloroform, in the proportion of two drachms to the ounce, it forms a mixture from which the chloroform readily evaporates, leaving pills which have been dipped and shaken in a few drops of it, covered with a complete and equable coating of tolu. The tolu renders the pill perfectly tasteless in the mouth; and at the same prevents the occurrence of changes in the drug, by forming a complete protection against various external influences. Iodide of iron pills, for example, when coated with tolu keep perfectly well; and they soon become soft and shapeless without some such protection. For some time past I have often ordered the pill I prescribed to be coated with collodion. It renders them tasteless; and can be applied in a minute or two, by shaking the pills in a saucer, after pouring a few drops of collodion over them. You will find that a collodion-coated pill speedily breaks up in a little water. But in the manufacture of tasteless pills our American brethren, let me tell you, have gone far ahead of us. I show you here a series of small bottles from New York, containing what look like comfits, which are, in reality, pills of various kinds—blue pills, pills of colocynth and hyoscyamus, of morphia, of aloes and iron, assafœtida, etc.—all coated with sugar, and forming, perhaps, the very perfection of an agreeable remedy. All the ordinary pills of the Pharmacopœia, and many others, have been coated with sugar like these before us, and they are not more expensive, nor less efficacious, as I am assured, than their usually disgusting representatives in this "old country." But the objection to the coating of pills with sugar is, that it requires to be done on the large scale, and cannot be applied to any dozen or two of pills that you may require to prescribe. In the drying of the sugar, moreover, they are exposed to a high temperature, which might destroy some of the remedies you wish to administer. But even when the disagreeable taste of the drug has been concealed, and such a pleasant taste as that of sugar substituted for it, there are some patients who have an inexplicable kind of constitutional difficulty in swallowing pills. Try it as they may, they tell you the pill "won't go down." In such cases you must administer a liquid preparation; and in prescribing such you must remember that the compound salts, such as the ammonio-citrate or the potassio-tartrate, which is the salt dissolved in the so-called wine of iron, are the least offensive; and that most patients find the phosphates administered in the form of syrup along with manganese and phosphoric acid, or along with lime, soda, potash, and muriatic acid, as in Parrish's "Chemical Food," not merely tolerable, but extremely pleasant and palatable. I have, for some years past, been much in the habit of using a fluid preparation that I have already alluded to—viz., the syrup of the perphosphate of iron made by dissolving one grain of the phosphate in a teaspoonful of a solution of the glacial phosphoric acid of the strength of the dilute phosphoric acid of the London Pharmacopœia. From twenty to thirty grains of sugar are also dissolved in each teaspoonful of the mixture. A teaspoonful of this syrup mixed in a wine-glass of water makes a draught which is to most palates not at all disagreeable. The usual inkish taste of the chalybeate is lost in it. I generally prescribe it with a grain of the phosphate of manganese added to each dose. Manganese has an action on the blood and body very analogous to iron, and, like nickel, may be employed both as a substitute for it and as a valuable addition to it. But the administration of iron, whether it be given alone or in combination with other tonics or emmenagogues, as in most cases it ought to be, will not usually suffice to restore the catamenial flow in every case, however long its use may be continued. In the majority of cases you will be called to recommend, or have recourse to, some additional, more direct means of treatment. It is advisable sometimes, for instance, to recommend certain

2. *External Applications.*—Cupping-glasses, poultices, and various irritants have been applied to the mammæ with the view of exciting a sympathetic action in the uterus, and cupping over the sacrum or the application of leeches around the verge of the anus, are often serviceable in plethoric subjects in relieving congestion and promoting the return of the menstrual secretion. Occasionally two or three leeches applied to the pelvis or limbs punctually every month appear, as it were, to teach Nature again her lost periodicity, and proves at last apparently successful in curing those cases of amenorrhœa in which there is no counter-indication to such small evacuations. Patients sometimes put their feet regularly into hot water with the same view; and you will occasionally meet with good results from the enforcing of this practice or from making the patient sit for four or five successive nights for twenty minutes or half-an-hour in a hip bath, to which, if you think fit, a little mustard may be added.

3. *Injections into the Rectum or Vagina.*—I have already spoken of aloes as sometimes given in cases of amenorrhœa along with iron, to counteract the constipating tendency of the latter; and I should have stated that aloes is preferred to other aperient drugs because of its exerting its special influence on the rectum and lower part of the colon, whence it is supposed that a reflex stimulus is conveyed to the uterus, which tends to excite that organ to full functional activity. Under the same idea injections of aloes and other local intestinal irritants have sometimes been recommended and made into the rectum, with, it is averred, occasionally successful results. More directly irritating applications to

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the uterus itself have sometimes been made by injecting various stimulating fluids into the vagina, as in Italy, where the injection into the vagina of a teaspoonful of aqua ammoniæ in a cup of milk has been recommended as one of the most certain measures for restoring the catamenial flow. I have still the local treatment of amenorrhœa to discuss; but I must reserve this topic till we meet again.

(To be continued.)

ORIGINAL COMMUNICATIONS.

CASE OF

GUN-SHOT WOUND OF THE KNEE-JOINT.

PRIMARY EXCISION—SUCCESSFUL—WITH CLINICAL REMARKS ON OTHER POINTS IN CONSERVATIVE SURGERY.

By D. W. CROMPTON, F.R.C.S.

Senior Surgeon to the General Hospital, Birmingham.

George W., aged 19, was admitted into the Birmingham General Hospital, December 26, 1860, having received the contents of his gun early that morning into the left knee-joint. He was putting a cap on his gun, with the stock on the ground, when the gun went off, causing a large circular wound opposite the internal condyle of the femur, and at an interval of about an inch and a-half, another larger wound over the inner side of the head of the tibia. Both wounds were blackened by the powder. On introducing my finger into the upper wound, I found that the shot had passed into the structure of the inner condyle of the femur, breaking off a portion loose into the joint, and then the force seemed to have passed downwards, grazing the inner side of the head of the tibia. The finger consequently could be introduced into the joint, and it appeared probable that most of the injury had happened to the inner part, and that the shot had not traversed the joint. Considering the patient's age, and the importance of saving his limb, if possible, I determined to open the joint by beginning my incision at the upper wound, passing through the lower one, and making a semicircular cut through the ligamentum patella to the other side, as is usual for excision. On turning up the flap with the patella, I found only the injury I have mentioned. I therefore sawed off a thin portion of the head of the tibia, and a corresponding thin portion of the condyles of the femur, for the purpose of making two flat opposing surfaces for anchylosis. I then sawed off obliquely nearly the whole internal condyle of the femur, on account of the destruction of its structure, cleared out all the shots, which were very numerous, and removed the fractured portion, placed the patient on a water-cushion, and the limb on a straight metal splint. The wound was closed by several sutures, and the whole swung in a Salter's swing. It will be observed that I did not meddle with the patella, or its cartilage, nor did I remove any portion of the articular cartilage of the femur, except what was attached to the portion of the condyles that were removed by the saw. The patella therefore was replaced in its articular position with the femur untouched. Wet lint was the only dressing applied to the wound.

December 27.—Pulse 112; has had some startings of the limb during the night. Evening; pulse 144.

28th.—Pulse 120; dressings removed for the first time.

29th.—Pulse 116.

31st.—Wound granulating and discharging healthy pus.

January 1, 1861.—Only three-fourths of the wound have united, the contused portions sloughing out, and the discharge free.

3rd.—Vomited; wound still looking sloughy.

9th.—Wound now suppurating healthily. He has been used to smoke and drink pretty freely, and was always a pale, thin person; looks ill, and very thin; diet generous, to have what he fancied as to food or drink.

21st.—Splint and paddings changed for the first time since the operation; transverse incision quite healed; the large wound on the inner side granulating up from the bone so as to approach the surface of the integuments.

25th.—Wound slowly healing.

February 1.—Wound reduced to the size of half-a-crown, having been from four to five inches square after the sloughing process was completed.

March 25.—The leg has been taken off the splints, and he can lift it from the bed without any assistance; got up for the first time.

April 1.—Can walk with a stick, and bear half the weight of his body on the left leg.

5th.—Discharged cured; wound closed, with the exception of a spot the size of a pea on the inner side; health good; can walk easily with the help of a stick without any application to the knee. On examining the present state of the limb, it is found to be from half to three quarters of an inch shorter than the other, but the most interesting part of the case is, that the patella is now as loose and plays as naturally over the end of the femur laterally, with every indication of the cartilages being still intact, as if the knee had never been opened. This, I think, is a new and unexpected feature as a result of excision, opposed to the not uncommon opinion that to leave the cartilages, or any portion of them, is a source of danger; and so it may be, when there is only a small opening into a joint. I have not unfrequently left the cartilage on the end of the tibia when removing a diseased tarsus by Symes's method, in cases in which the tibia was not affected, and I have not yet had any cause to regret doing so. In connexion with the subject of excision of the knee, I would ask whether the "dictum" (for it has become one) that excision of the knee-joint in young persons is an operation that ought not to be performed is to be the rule without exception, because the limb does not grow after excision? Now I am quite prepared to admit that, if improper cases are made the subjects of excision, that is, if a large portion either of the femur or of the tibia must be removed, which has sometimes been the case, on account of the difficulty of making a correct diagnosis previous to operating, the chances are greatly in favour of the limbs of young persons being useless, or that bony union will never be perfect. In either case, no doubt the limb will not grow. It should not be forgotten that long disuse of a limb in the young, suffering from diseased joints, whether arising from the pain caused by disease or from distortion the result of such pain, and "domestic surgery," is alone sufficient to cause a want of symmetrical growth in the limbs. Who has not seen many such cases in young children in our own streets, with a knee bent up, hopping about with a single crutch almost as nimbly as their companions? Examine such limbs, and it will not uncommonly be found that, after a certain time, the femur or tibia (or both) are smaller in circumference and shorter in length. Every operator must have remarked, to his annoyance, how easily the periosteum strips from the cut end of the femur, when he is amputating such limbs, causing a ring of necrosed bone to exfoliate before the stump will heal soundly. This is only one effect of want of use of the limb. Contrast this state with the firm adhesion that exists between the periosteum and bone when amputating a limb for a recent injury. I am aware that even a moderate use of the leg when the knee-joint is diseased will prevent this want of symmetrical growth; this very fact is an encouragement to hope that if we can succeed in giving our young patients a firm union, and otherwise useful limb, we shall find that using the leg in progression will, according to the laws of Nature, give sufficient "stimulus" (an Hunterian word, and a good one) to cause a continued growth, proportioned to the growth then going on in the other limb. We must not, however, expect that Nature can ever make up the shortening which probably existed previously to the operation, and which, I suspect, has not uncommonly been overlooked, as well as the reduction in length caused by the operation. No doubt Nature will not throw away her efforts on a limb six inches too short, or on one which cannot be brought to bear the weight of the body; neither the bones nor the muscles in such cases will increase in growth, but I believe that if Nature is well assisted, we may yet safely suspend our judgment till some good cases have been watched for two years or more, before we condemn the diseased limbs of children or growing persons to amputation. I repeat, let the limbs be carefully measured and compared before, as well as after, excision, and then again after an interval of, say two years' use of the limb, before we assert as a fact that young bones do not grow after excision.

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I have now under treatment a case of excision of the knee for necrosis in the head of the tibia, causing ulceration of the cartilage into the joint (but which, I am sorry to say, I shall lose from pus poisoning before this paper is in type), in whom I found the affected leg, when carefully measured from the trochanter to the end of the fibula, three-quarters of an inch shorter than the sound one, before excision was performed. This I attribute to the long disuse of the limb in a girl of 17, the age at which it is well known most young people shoot up into mature height very rapidly (a).

Another point to which I wish to draw attention is the fact that there are certain cases of inflammation in joints, particularly in the knee, whether arising from injury, or from rheumatic inflammation, which after running a lengthened course (becoming chronic as it were) from some renewed injury, or other cause, take on an acute destructive action, ending in suppuration, accompanied by such pain and constitutional disturbance as to endanger life, and for which cases it has been usual to amputate as soon as possible. Such cases, for what reason I do not know, have been considered bad, either to amputate or to excise; this indeed may be the fact, but I know that Sir Charles Bell, Mr. Lloyd, of Bartholomew's Hospital, and others, have recommended and practised opening the joint to evacuate the pus. I have seen the same practice adopted by my former teacher, the late Mr. Wood, at the General Hospital, Birmingham, who never did things by halves, in more than one case where the joint appeared distended with pus, he opened it freely with a bistoury, with the effect of saving the limb in an anchylosed state. The incisions, to be of use, must be very free and depending, so as to allow free exit to the pus already formed, and prevent the lodgment of any in future; a small incision is worse than useless. I subjoin two cases, shortly reported, in which I practised incision nearly as for excision, making large lateral wounds for the free discharge of pus, but without opening the structure or shortening the limb by removing any portion of bone:—

Case 1.—William B., aged 17, admitted into the General Hospital, Birmingham, May 20, 1859. He had, nine months before, received a severe blow from a railway collision upon the knee and head of the tibia, which produced such pain that he was unable to work, and was under Medical care for a considerable time without much improvement. When admitted he complained of pain over the head of the tibia, and the knee-joint was enlarged. I used Scott's dressing, iodine paint, etc., but without much improvement. His health became impaired, and acute inflammation rather suddenly took place over the tibia, ending in the formation of pus. The knee-joint soon participated in the inflammation, and the starting pains and fever were acute. There was evidence of pus in the joint. I, therefore, determined to open it freely and relieve the tension; with this object I made a long incision on both sides of the patella, rather posteriorly, as if for excision. I passed my finger into the joint, and under the patella, finding nearly all the cartilages gone. The patient was placed on a water-cushion, the leg on a straight metal splint, and swung in a Salter's swing. His appetite returned almost immediately, the pain ceased, and the boy was discharged cured, with a stiff joint and useful leg.

Case 2.—Eliza D., aged 30, married, native of Birmingham, admitted September 19, 1850, with chronic inflammation of the right knee-joint, accompanied by considerable serous effusion into it. Six years before she had twisted her knee when taking off her boot, inflammation of the knee followed, and an abscess resulted, external to the joint, over the head of the tibia, on the outer side, the cicatrix of which was large, and attached to the bone. She was re-admitted three years ago under my care, on account of inflammation of the joint, which was subdued by blistering and rest, etc. She walked out of the Hospital apparently well, and continued so until July, 1860, when the knee again swelled and gave her pain. She was then once more admitted with the joint as above described. Treatment by severe blistering, etc., did not now relieve her; and a month after admission she was seized with sudden and very severe pain on the inner side of the joint; this pain continued to be excessively acute, the swelling of the joint much increased, and constitutional symptoms, which were very severe, pointed to destructive suppuration having taken place.

October 24.—Two very free lateral incisions were made, on either side of the patella, giving vent to a large quantity of pus and flaky serum. The leg was placed on the straight metal splint, and swung in Salter's swing. The patient was put upon a large water-cushion, and the wounds poulticed. The discharge continued to be free and copious, while the pain was entirely relieved.

February 11, 1861.—The wounds were entirely healed, the leg was taken off the splint and found to be firmly anchylosed. A gutta percha splint was applied to give increased confidence to the limb, and she was allowed to move about.

March 8.—Discharged; the limb quite anchylosed.

April 12.—Quite well, and walks well with the aid of a stick.

In connexion with this subject, I think a more full account of Dr. Cooper's experience at San Francisco than is given in the *Medical Times and Gazette* of April 13, would interest the Profession. His practice appears to be bolder than we have been at present accustomed to see in this country.

(a) April 15.—Since writing the above the poor girl has sunk. She was 17 years of age. On examination, we found crude tubercle at the apex of each lung, but she died from phlebitis, the iliac vein being filled with, and imbedded in, a large collection of pus. A clot of fibrine obstructed the femoral as it entered the pelvis, and another clot obstructed the inferior cava, about two inches above the entrance of the iliac vein. This is the first patient I have lost after excision of the knee, and I have operated six times. I find in the Hospital records, that we have now excised nineteen knee-joints, giving eleven good recoveries, with useful limbs, four deaths, two cases now under treatment. The deaths were occasioned, one from pyæmia, one from shock, one from erysipelas and small-pox, with phthisis, and the one above referred to from phlebitis.

ON THE TIME AND MANNER OF CLOSURE OF THE AURICULO-VENTRICULAR VALVES.

By GEORGE B. HALFORD, M.D., M.R.C.P. Lond.
Lecturer on Anatomy at the Grosvenor-place School of Medicine.

There are two things necessary to the closure of these valves; viz., shutting down of the semilunar valves and auricular contraction.

When the auricle is about to inject the ventricle, the latter is empty and contracted, with its distal or ventriculo-arterial valves firmly shut down by the pressure of the blood upon their upper surfaces. Immediately the auricle contracts, its contained blood passes into (distending and lengthening) the ventricle; the force which it transmits not being sufficient to overcome the arterial pressure and weight of blood upon the upper or arterial surface of the semilunar valves, is expended in distending the ventricle and closing the auriculo-ventricular valve, which then forms one of the walls of the ventricle. (See Figs. 1, 2 and 3.) To this succeeds the ventricular contraction, the auriculo-ventricular valve, being already closed, now becomes tense, the pressure in the ventricle overcomes that in the artery, and the semilunar valves are raised.

That the above is correct is proved as follows:—If we cut away the auricle and clear out the coagulum from the ventricle, on placing the heart in fluid we find that the flaps of the auriculo-ventricular valve are borne up to a certain extent towards the auriclo-ventricular opening (See Fig. 4); but the latter does not become closed without employing force, as with a stream of water thrown with a syringe from the direction of the auricle, and this closure is not perfect nor sustained without first shutting down the semilunar valves, which is best done thus: for a human heart an elastic self-supplying syringe with a tube of like diameter with the aorta or pulmonary artery, is adapted to either vessel and its semilunar valves shut down, gentle pressure being maintained by the fingers upon the bottle in imitation of the elastic pressure of the aorta or pulmonary artery. If the ventricle be now injected, the closure of the valve is instantaneous, its upper surface becoming convex (not funnel-shaped), and its under surface deeply concave (see Figs. 1, 2 and 3). For a bullock's heart I have used a plumber's forcing pump, and for a bird's a smaller apparatus, and with the same result in all cases. These and many other experiments upon the valves have been for some years past many times

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repeated; they have been performed upon the largest hearts under water with powerful apparatus purposely constructed.

Fig. 1.

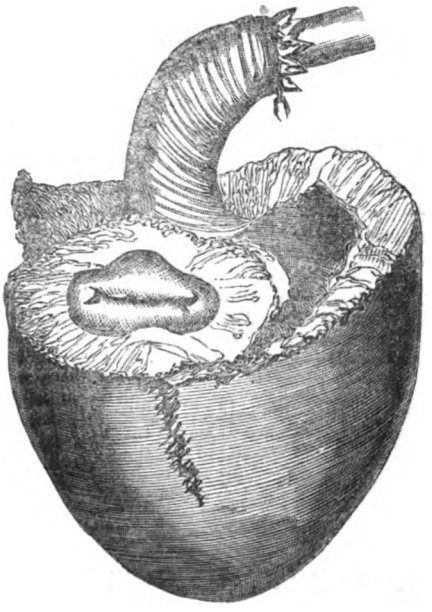

Fig. 1.—Back view of the heart; auricles cut away. The semilunar valves having been shut down and the aorta distended with fluid, the left ventricle was filled with water with a syringe from above, and the mitral valve closed.

Fig. 2.

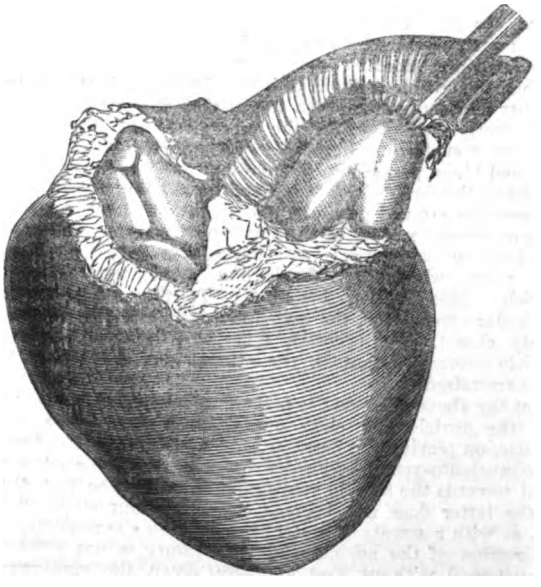

Fig. 2.—Front view of the heart; auricles removed. The pulmonic valves shut down and the artery distended. The right ventricle has been treated as the left in Fig. 1, and the tricuspid valve closed.

Fig. 3.—A diagram representing the state of the ventricle immediately after its injection by the auricle. The auriculo-ventricular valve is raised and convex on its upper surface, as in the preceding figures. The capacity of the ventricle has been increased, its base has been raised, and at the instant of its contraction the semilunar valves *must* open. This enables us to comprehend better the force of the ventricular contraction, and explains what Dr. Marey has lately proved regarding the arteries, viz., "That all pulsations commence at the same time." The dotted line represents the pericardium, and the arrows the direction of the pressure.

Fig. 3.

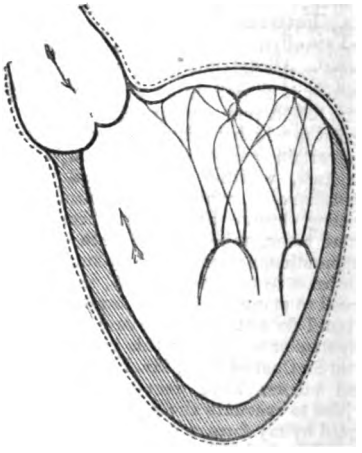

Fig. 4.

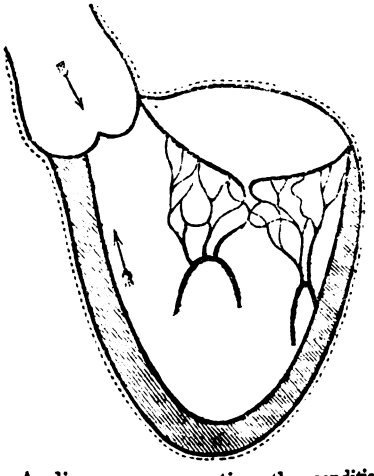

Fig. 4.—A diagram representing the condition of the ventricle and of the auriculo-ventricular valve, if, as is generally taught, the latter is closed by the contraction of the ventricle. The upper surface of the valve is concave, the capacity of the ventricle is thus lessened, and at the instant of its contraction *not the semilunar, but the auriculo-ventricular valve would be raised*, by which both time and power would be lost.

From this it will be seen, I think, upon reflection, that the auriculo-ventricular valve must be closed previous to the systole of the ventricle, as in Figs. 1, 2, 3, otherwise the ventricle could not thoroughly be filled, nor could the valve itself perform its office properly, for as the ventricle contracts and its base descends, the valve would be made to yield towards the auricle at the very time it is required to be unyielding. But with the valve closed by the end of the auricular contraction, as in Fig. 3, there is not only no chance of yielding towards the auricle, but the ventricle is in that condition to exert its power most instantaneously and effectively, as the prime mover—the *fons et origo*—of the circulation. *The rapidity and power of its action would be impaired were any of its force expended in a backward direction, had it indeed to close the auriculo-ventricular, previous to opening the semilunar, valves!*

But it may be asked, How can the force of the auricular contraction be brought to bear upon the under or ventricular surface of the valve?

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The following observations point to the means by which this process is effected :—

1st. If we open a ventricle and cut away the flaps of the auriculo-ventricular valve from their attachments both to the zona tendinea and to the chordæ tendinæ. On placing the preparation in fluid, the chordæ tendinæ rise up like stems of aquatic plants from the musculi papillares, and from the sides of the ventricle.

2nd. When the chordæ tendinæ are cut off close to the under surface of the flaps of the valve, the latter are still supported to a certain level in the fluid and their delicate margins curl upwards towards the auricle. This latter fact is more evident in the right than in the left ventricle, and is attributed by Dr. Markham, who, I believe, was the first to remark it, to the presence of the elastic tissue entering into the structure of the valve. That this curling upwards exists is shown as follows :—

(a.) Supposing a whole valve with the upper part of the ventricle to be cut out so as to form a muscular ring with the flaps of the valve hanging loosely ; on being placed in fluid with the auricular surface *upward* the flaps are supported and their delicate margins turn up as little scrolls.

(b.) The same preparation being placed in fluid with the auricular surface *downward*, the flaps still rise, but their edges now turn downward, which is not the case with any other part of the valve.

(c.) A piece of the right auriculo-ventricular valve having been cut out from its attachments and placed in water, the above-described curve was maintained for days.

Now, if to the above we add that the ventricle in filling is an enlarging cavity, and that this enlargement and elongation take place below the attachment of the valve to the zona tendinea, and that in this elongation and upward movement of the base the valve participates, and if we remember that, even to the last drop of blood from the auricle there is a force causing the particles of the blood within the ventricle to press upon the under surface of the valve, even after the auricular contraction has ceased (for it cannot be supposed that ever, even for an instant, the blood is at rest), then are we led to the following conclusions, viz. :—

The chordæ tendinæ by position serve to open out and prop up (as stems of water-plants do their leaves) the flaps of these valves ; their firm connexion at the circumference with the zona tendinea tends also to their support ; moreover, the elasticity producing the upward curl, assists in the approximation of their edges ; finally, the pressure exerted by the blood from the auricle brings all into play, and their closure is effected.

Who can refrain from admiring this instance of economy of time and power, by which the ventricle is assigned its one function of expulsion, and the very force which fills and distends the ventricle closes these valves? This force is auricular contraction.

17, Victoria-square.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

CONDUCTED BY

JONATHAN HUTCHINSON,

Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital,

AND BY

J. HUGHLINGS JACKSON, M.D.

THE LONDON HOSPITAL.

MEDULLARY CANCER IN THE UPPER PART OF THE FIBULA—AMPUTATION.

(Under the care of Mr. CURLING.)

John M., a German, aged 27, was sent to the London Hospital by Mr. George C. Dale, under whose care he had previously been, on account of a tumour in the leg, which was suspected to be malignant. The tumour in question was about the size of a fist, and was situated over the upper part of the left fibula. The skin over it was tense and a little discoloured. To the finger a sense of pseudo-fluctuation was perceptible in all parts, as if some soft, almost diffluent, solid were tensely bound down. The man's history was, that he had first felt what he thought was "rheumatic" pain in the part about six months ago. About three months later an enlargement was noticed, and the growth during the last six weeks had been rapid. He had experienced less pain latterly than he did at first. He was a pale complexioned man, but considered himself in good health.

Mr. Curling expressed a confident opinion that the disease could be none other than a malignant growth, and advised the man to submit to immediate amputation. To this, after some hesitation, the poor fellow agreed to consent, although it was difficult to persuade him that a swelling, as yet of such limited size and which had been productive of such slight inconvenience, required so serious a measure of treatment.

The operation was performed on May 2. In order to be secure against any error of diagnosis, Mr. Curling first cut into the tumour, and having satisfied himself as to its nature, then proceeded to amputate above the knee. After removal of the limb the diseased growth proved to be, as expected, medullary cancer of the fibula. The shaft of the bone had given way just below its neck, having been infiltrated with cancer. The tissue of the new growth was soft and pulpy, and under the microscope showed cells and nuclei in vast abundance, and of great variety as to form and size. Most of the cells had large and distinct nuclei, which latter had in their turn large dark nucleoli.

The man has done well since the amputation.

EXTENSIVE ULCERATION OF THE RECTUM, FOLLOWED BY STRICTURE—RECOVERY.

(Under the care of Mr. CURLING.)

[Reported by Mr. W. B. WOODMAN.]

The following case is an interesting example of a cicatricial contraction of the rectum, in which great benefit was obtained from the use of bougies. As the cicatrix was of recent formation, it yielded easily. Mr. Curling gave a decided opinion that the original disease was not carcinomatous, but whether it had taken its rise in some form of dysentery, or was due to any constitutional dyscrasia, such as syphilis or struma, it was not so easy to say.

Hannah L., aged 21, a sailor's wife, was admitted on December 12, 1860, when the subjoined notes as to her history, etc., were taken:—There are scars in the neck from strumous disease of the glands. The catamenia appeared at 15. She was married two years ago, but has had no family, and has only menstruated once or twice since her marriage. Has had piles, which have bled occasionally for five or six years past. About six months ago she began to feel constant dragging pain, like "bearing down," in the lower bowel, and began passing blood in her motions. The bowels had been very confined for a long time previously, but now she began to have five or six dark slimy stools, with dark blood in them, every day, and the pain increased in severity, especially when the bowels acted ; but she found relief when she lay quiet in bed. These symptoms continued when admitted. She is of middle height, tolerably well-nourished, but of slender proportions. Hair dark, eyes gray, face pale and anæmic, and, when admitted, wearing a very anxious expression. Pulse feeble and rapid, skin harsh and cold. She is extremely feeble. Her appetite is bad. Tongue clean, but very florid. Eyes prominent, but rather dull. Bowels relaxed. Stools dark, rather slimy, but moderately firm ; mixed with clots of dark blood, and occasionally some in a fluid state. She was in great pain, slept but little, and had an occasional cough. On examination, external piles were found, and the finger on being introduced into the rectum, met with a very irregular surface, exquisitely tender at some points, and at these apparently rugged, while other parts seemed nodulated ; these prominences being hard, but less so than schirrus usually is. The finger when withdrawn was tinged with blood. There was no stricture. Ordered, rest in bed : a suppository of soap and opium every night.

December 14.—She is easier. Diarrhœa and passage of blood still continue. Ordered an injection of a solution of nitrate of silver (gr. ij. ad. ℥j.) every morning, and a mixture of bismuth, mucilage, and Battley's solution, three times a-day.

18th.—Less pain, less anxiety of countenance. Bowels not so relaxed. Sleeps better. Appetite is returning.

25th.—No blood in motions now. General health im-

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proved. Pulse firmer. Finds great ease from the suppositories.

26th.—Less hardness and tenderness. Better altogether.

January 10.—No blood per anum for several days. There is now a strong tendency to contraction just about two inches within the anus. No. 8 bougie to be introduced daily, No. 7 having first been tried. The passing of the instrument gave some pain at first, and was followed by a thin, colourless, viscid discharge, apparently mucus.

14th.—Bougie passes more readily. Says her motions passed more easily to-day, although firm. Bougie to be passed on alternate days.

28th.—No difficulty in passing the bougie now. Is stronger, but rather anæmic. To take the mixture of iron in ten minim doses.

February 9.—No difficulty at all in passing bougie, which gives no pain. Gets out into the garden daily. A little discharge follows any over exertion. Appetite improved. Less anæmic.

March 1.—The discharge has quite ceased. The bougie passed without difficulty or causing pain. She was much stronger, and, considering herself cured, left the Hospital.

THE POPLAR HOSPITAL.

WOUND OF THE THROAT AND PENIS (SELF-INFLICTED) DURING DELIRIUM TREMENS OR MANIA.

(Under the care of Mr. CORNER.)
[Reported by Mr. BROWNFIELD, House-Surgeon.]

John D., aged 49, was brought to the Hospital by a policeman on Sunday, July 29, 1860, about half-past ten in the evening. He was a repulsive-looking man, dirty and offensive. He seemed very stupid, and his manner was hurried and tremulous. He had been drinking hard during the previous week; but during the week of his admission had, he afterwards said, taken nothing but two pints of beer and no solid food. Across his throat for about two inches, over the larynx was a superficial wound; there was also a gaping wound of the penis near the root, about half way round, not extending into the urethra. The wounds were dressed, the wound of the penis being brought together by stitches. He was ordered milk and beef-tea diet, and gin and beer. Thirty-five drops of opium were given at once, and ten drops every four hours.

Next day, July 30, he was better; he had slept well and the tremor was less. He now gave the following account: On leaving his work on Friday night (the 27th), he drank a pint of beer at a tavern, and then feeling sleepy went into a meadow near the tavern and lay down and slept. He said that when he awoke he found himself surrounded by about a dozen men armed with sticks and knives. They threatened that if he did not cut his throat and penis, they would do it for him. He therefore inflicted the injuries above-mentioned with his pocket knife. The men then disappeared, and he lay down again and slept on and off until Sunday afternoon. A thunderstorm then coming on, he was fully roused and he left the field. He met a policeman, and told him what he had done. He was taken to the police-station, and thence sent to the Hospital.

He progressed favourably until August 1. In the evening of that day he complained of great pain on the top of his head; a blister was applied to the neck; next day he was much better.

The wounds healed slowly; but ultimately they quite healed. He left the Hospital on August 28. He was not then free from delusions, and was again given into the care of the police.

ST. THOMAS'S HOSPITAL.

REFLECTED PAIN IN THE KNEE FROM DISEASE OF THE HIP-JOINT.

Mr. Le Gros Clark has at present under his care a boy, aged 9, whose case illustrates, in a marked degree, the well-known fact that often in cases of disease of the hip-joint the pain is referred solely to the knee. In this case the whole of the pain is in the knee, and this is the more remarkable, as it is now nearly eighteen months since the disease commenced. The knee might be bent or examined in any way, and yet no pain was complained of, but the least motion of the hip-joint produced severe pain in the knee. Pressure over the hip, except deep pressure over the femoral vessels, and this Mr. Clark believed was from movement of the joint, produced no pain. In fact, at no time had the child suffered pain in the hip. There was no sinus, and no swelling. The distance between the trochanter and the spinous process was not so marked. This, Mr. Clark believed to be due to shortening of the neck of the femur. Of course no Surgeon would be deceived by the boy's constant iteration that the pain was "all in his knee," but being a marked instance of reflected pain, it is worthy of record. The generally received explanation of its being due to pain reflected along the course of the obturator nerve, by means of the twig this nerve gives to the joint, is equally well known. It is produced probably just in the same way as the circumorbital pain in iritis or neuralgia of branches of the fifth, other than the dental, from a decayed tooth, there being in the case of the iritis often no pain in the eye, and in the neuralgia no pain in the tooth except on pressure.

CASE OF RECURRENT FIBROID TUMOUR OF THE THIGH.

There is now under Mr. Le Gros Clark's care, in St. Thomas's Hospital, a case in which a growth has recurred for the third time. There is a small mass on the outer side of the middle of the left thigh, ulcerated on the surface. It occupies the lower part of the scar left by the last operation. The patient, a man, aged 33, is in other respects in perfect health. The first appearance of the disease was three and a-half years ago. About two months after he first noticed it, it was the size of a walnut. It was then removed in the London Hospital. Eighteen months later, a recurrent growth was removed by Mr. Le Gros Clark. It was then found to present the microscopical character of returned fibroid. Six months after this second operation, the man found a small lump, about the size of a pea. This has gradually increased, and is now a small irregular mass, ulcerated on the surface. Mr. Clark intends again to remove it. May 7.—Mr. Clark has since the above note removed the disease. The microscope confirmed the diagnosis of its being recurrent fibroid.

CASES OF DISEASED JOINTS.

Mr. Le Gros Clark drew the attention of the students to several cases of diseased joints, with reference to the mode of attack. He had found that the patient would date the origin of the disease to a distinct attack of "rheumatism," in which nearly all the joints were affected. Then the attack would pass off, leaving, however, one joint still diseased, and that this would grow steadily worse until it became *par excellence* a diseased joint. One of the cases seen was a woman, aged 30, who was admitted for synovitis affecting the right knee. She said that, three or four months ago, on a Friday, she was suddenly attacked by very severe pain in both knees, so that she could not walk, and was quite laid up. The joints were swollen. On Sunday, the right arm was swollen and painful up to the elbow. In a few days all the joints were well, except the left knee. This continued to get worse. When admitted, she had the usual symptoms of synovitis; and recently, the swelling having greatly subsided, she has had fixed pain over the posterior of the inner condyle, leading Mr. Clark to fear some local and more serious disease. Before the first attack alluded to, her health had been good, and she had not been exposed to cold. Another case, also a woman, aged 24, had a history nearly the same. She had been sleeping in a damp room, and then had what she calls "rheumatism," nearly all the joints of her body, fingers included, being swollen and painful. All the joints, with the exception of the right knee, soon got well, but this grew worse. She suffered much pain in it, and was much reduced in health. When admitted, it was clear that the disease had gone on to disorganisation. Mr. Le Gros Clark therefore excised the joint. It is now eight weeks since the operation. She has done remarkably well, and has improved very much in general health. The wound is now quite healed. The *ci-devant* joint is sound, firm, and painless. It is encased in gutta-percha as security against accident. She walks up and down the ward with assistance.

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CASES OF EPITHELIAL CANCER.

ST. BARTHOLOMEW'S HOSPITAL.

EPITHELIAL CANCER OF THE HAND.

(Under the care of Mr. STANLEY.)

A healthy-looking man, aged 60, was admitted for a cancerous ulcer on the back of the hand. It was about twice the size of a crown-piece, and had been first noticed three years before. The glands in the axilla were enlarged. Mr. Stanley removed the ulcer, but left the glands. The wound went on favourably, but the glands in the axilla continued to enlarge, and the glands also about the elbow enlarged, and ulceration ensued. The man was discharged when the ulcer was nearly healed.

GUY'S HOSPITAL.

EPITHELIAL CANCER OF THE INSIDE OF THE CHEEK—EXCISION—RECOVERY.

(Under the care of Mr. COCK.)

Robert M., aged 49, was admitted December, 1860. In September last he first noticed a small spot in the inside of his right cheek. This he confidently attributed to the irritation of a tooth. He had never had any pain in it until just before the operation, and then the pain was very trifling. Mr. Cock made an incision from the angle of the mouth towards the ear; thus exposing the diseased mass he was enabled to dissect it away. The lips of the wound were then brought together. The wound healed, and the man was discharged well.

ADDENBROOKE'S HOSPITAL, CAMBRIDGE.

EPITHELIAL CANCER ON RIGHT TEMPLE—REMOVAL—RECURRENCE IN THE LYMPHATIC GLANDS UNDER THE JAW AND OVER THE PAROTID—REMOVAL—RECOVERY.

(Under the care of Dr. HUMPHRY.)

J. T., a healthy man, aged 66, was admitted for epithelial cancer on the right temple. Extending from the outer canthus of the right eye upon the temple was an irregular circular ulcer about two inches in diameter. It appeared adherent to the outer edge of the orbit. There was no enlargement of the adjacent glands. He first noticed it twelve months before, and it had gradually increased in size. Dr. Humphry (July 6, 1860) removed the ulcer completely with the knife, cutting away a portion of the external angular process of the frontal bone and of the temporal fascia, exposing, therefore, the temporal muscle. The wound healed well, and he left the Hospital a month afterwards.

He returned in September, with enlargement and induration of the glands near the angle of the jaw, and of some upon the surface of the parotid, adherent to the skin, but moveable upon parts beneath; those below the angle of the jaw were apparently less free. On September 28, 1860, Dr. Humphry removed them—he believed entirely. It was necessary to cut deeply—to remove part of the anterior edge of the sterno-mastoid muscle—to expose the carotid and the facial nerve. He was made an out-patient October 22, 1860.

EPITHELIAL CANCER OF THE HAND—REMOVAL—RECOVERY.

(Under the care of Dr. HUMPHRY.)

S. M., a woman, aged 68, was admitted for epithelial ulcer, situated on the dorsum of the left hand. Over the middle of the metacarpal bone of the index-finger was an irregularly-shaped ulcer, one inch in diameter. There was no decided evidence of disease in the axilla. It had been first noticed about three years before. It had since been ulcerating and increasing in size, and it had been very painful. Dr. Humphry (July 20, 1860) excised the ulcer, taking away the fore-finger with its metacarpal bone, and filling up the gap by a flap of skin saved from the finger. Recovered.

EPITHELIAL CANCER OF TONGUE REMOVED BY ECRASEUR.

(Under the care of Dr. HUMPHRY.)

J. S., a healthy-looking man, aged 57, was admitted with a flat ulcer, the size of a shilling, on the upper surface of the tongue, near the right edge, and about midway from tip to hinder part. The surface of the ulcer was red and finely granular. It was raised, and had a hard base and defined hard edge. A hard mass could be felt running back from the ulcer towards the epiglottis, confined apparently to the surface of the tongue. The hinder edge of this could be quite clearly distinguished. There were some superficial ulcers upon it. There was no enlargement of the submaxillary glands. The man said that the disease had existed only a month. It must, however, have been of much longer duration.

December 14, 1860.—Dr. Humphry, having transfixed the tongue with a needle from before backwards, and by another transversely, passed the chain of the ecraseur beneath the needles, and removed a large portion of the tongue—nearly half of it. The disease was all included in the removed portion, except at one side of the hinder part; so, with needle and ecraseur, Dr. Humphry removed another piece.

February, 1861.—He has left the Hospital, but is attending as an out-patient.

THE NORTHAMPTON INFIRMARY.

FRACTURE OF THIGH—DRY GANGRENE OF FOOT—AMPUTATION—RECOVERY.

(Under the care of Mr. MASH.)

J. H., aged 60, a rather feeble and anæmic-looking man, was admitted under the care of Mr. Mash, August 11, 1860. By falling from a load of vetches under a waggon, he had sustained apparently a simple fracture of the femur a little below the middle. There was neither wound nor any indication of severe contusion, but the fracture appeared very oblique, and a small portion of bone seemed to be almost detached from the outer side of the upper fragment. The limb was carefully put up in the long straight splint; but he complained of much pain in the limb, constantly sat up in bed, and disarranged the bandages, etc., which were re-applied on the third day without anything unusual being noted in the condition of the limb, except some general swelling to no great extent. His restlessness and complaint of pain continued, but he was evidently the subject of mental peculiarities, which afterwards developed into decided melancholia. On the sixth day the toes and anterior portion of the foot were observed to be cold, pale, insensible, and somewhat shrunken. The splint and bandages were removed, two short lateral splints lightly applied to the thigh, the foot and leg thickly invested in cotton wool and blankets, and then fastened to the long splint by a sheet. On the following day the whole foot was cold, whitish, mottled, and perfectly insensible as high as the ankle; the leg red, slightly tumid, hot, and rather tender as high as the knee. Thigh considerably swollen, but not at all tense; large livid ecchymoses extended along almost its entire length on its posterior and inner aspects; the temperature was decidedly below that of the other limb; there were no vesications, and no change of colour in the skin, except at the ecchymosed patches. On deep pressure towards its upper part, where swelling was most manifest, an obscure sense of deep fluctuation was detected. The posterior tibial artery was felt beating feebly, the anterior not to be discovered. The patient did not complain of feeling ill, and the pain had subsided. Tongue clean; appetite good; pulse 80, full, but occasionally intermitting. A soft systolic murmur was distinctly audible below the nipple. Ammonia, wine, and bark were given freely. In three more days the pulse rose to 104, the thigh was less swollen, and a well-marked line was formed immediately above the ankle. For three weeks afterwards little change occurred. At the end of the fifth week from admission the foot had become dark, shrivelled, and mummified, and a thin line of ulceration had formed round the ankle, the leg remaining rather hot and swollen. In three more weeks, separation of the gangrenous parts being considerably advanced, and the original fracture being firmly consolidated with a large profusion of callus, circular amputation was performed below the knee, under chloroform. The wound healed almost by first intention, and in a month he returned home perfectly well. No constitutional symptoms of importance occurred throughout the whole progress of the case. Unfortunately from accidental causes the arteries of the removed limb were not examined.

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ST. BARTHOLOMEW'S HOSPITAL.

INFLAMMATION OF THE PAROTID SALIVARY GLAND.

(Under the care of Mr. WORMALD.)

A man, aged 24, admitted a few days ago for inflammation of the parotid salivary gland. There was a swelling mapping out the position of the parotid and the socia parotidis. He had had great pain for a month, and had been obliged to take opiates regularly. The treatment Mr. Wormald adopted was to puncture the swelling in many places deeply with a scalpel There was no suppuration, but this treatment at once relieved the pain, and the man was able to dispense with opiates.

FISTULOUS OPENING IN THE NECK COMMUNICATING WITH THE PHARYNX.

(Under the care of Mr. STANLEY.)

A woman, aged 30, admitted January 8. Three months ago a very painful swelling appeared on the right side of the neck, which appears to have been diffused over the greater part of that side of the neck. About a week after admission there was fluctuation, and the swelling was opened. Another opening, about two inches above the clavicle (its outer third), was made on February 7, and matter evacuated. About a fortnight later she "began to vomit matter," and shortly after fluids passed through the wound when she drank. From April 30 very little if any passed, and she is fast improving in general health. The external opening is very small.

SCIRRHUS OF THE MALE BREAST.

A man, aged 52, a few days ago was brought to the consulting-room to see Mr. Wormald. He had in the left breast a small very hard swelling superficially ulcerated. Its appearance was characteristic, and no one had any doubt as to its being scirrhus. The man was in good general health. He said that twelve months ago he first noticed a redness of the nipple, which he attributed to the irritation of his braces. It became ulcerated about four months before. He had never had any pain of any consequence in it. In the axilla of the same side was an enlarged gland, but this was large and soft, and clearly traceable to the irritation of a sore on the hand. Mr. Wormald advised removal, to which, however, the man would not consent.

KING'S COLLEGE HOSPITAL.

EXCISION OF THE ELBOW-JOINT — CLINICAL REMARKS.

(Under the care of Mr. FERGUSSON.)

The patient, a woman, aged about five-and-twenty, had been under Mr. Fergusson's observation for eight years. As for some time the disease seemed of a character likely to get well, no operation was done. During the last winter she began to suffer so much from it that she was admitted into the Hospital. The pain, however, in spite of the rest and good food in the Hospital, increased; her health suffered; the elbow was much swollen; and it was evident that the joint was hopelessly disorganised.

As the patient had waited eight years, and as she would probably—if cure without operation was contemplated—have to wait many more, Mr. Fergusson determined to excise the joint. Another danger, he said, to which she would be exposed if left with the diseased joint, was that some Surgeon might amputate the limb.

On Saturday, April 29, Mr. Fergusson excised the joint. He made the H incision. He cut off the olecranon and then removed the ends of the bones entering into the formation of the joint. The lower end of the humerus and the ulna he removed by the saw; the head of the radius by the bone-nippers.

On removal and examination of the parts it was clear, Mr. Fergusson said, that nothing but resection could have been of any use. The cartilages of the joint were extensively destroyed, and the lower end of the humerus was much diseased. For any one to talk of restoring a joint in which the disease had progressed so far, betokened, in his opinion, more of the promises of a charlatan than of the confidence of a Surgeon. The promise of the charlatan, as for instance, in curing extensive cancer of the breast, might result in something like the semblance of truth; as the mass might slough off. Again, if it were possible that the diseased joint should ever get well, it would be after a great lapse of time, and would probably result in a very awkward limb.

LITHOTOMY IN CHILDREN—CLINICAL REMARKS BY MR. FERGUSSON.

On Saturday, May 4, Mr. Fergusson performed the lateral operation of lithotomy on a child three years of age. The child had had symptoms of stone for eighteen months. Mr. Fergusson stated that he had not succeeded in introducing a staff as large as would usually pass readily in children at that age. He said that he preferred to introduce as large a staff as possible, as it did not matter about its being readily moveable, as in the case of the sound. The introduction of a small staff required more care and skill, in order to know where the point of the instrument passed. The point of a small staff might pass out of the urethra, and this, too, although its general direction appeared to be correct. This, he said, was not a mere theoretical objection, as he had known such an accident to happen in the hands of a very distinguished operator. Mr. Fergusson added, that if in the case in which he had just operated, he had not touched the stone by the staff, he would not have proceeded. In reference to lithotomy in children, he said, that it was a rule with him to take more time and care than with adults, as he felt certain that there was much more risk of getting wrong with lithotomy in children than in adults. In children the tissues were less firm and the resistance consequently not so great. The incision also was required to be on a smaller scale. He always endeavoured to make as small an opening into the membranous portion of the urethra as possible, and only just notch the prostate or even leave it altogether untouched. The next step, the introduction of the finger into the urethra was, however, the one in which the greatest mischief might be produced by want of care—mischief often irreparable. The membranous portion of the urethra and the neighbouring tissues, were, in children, soft and easily torn, and the urethra might give way above as well as below the staff, and thus (separated all round) be pushed before the finger towards the bladder. The finger would then move about in a pouch thus formed, and the completion of the operation would be almost impossible. He had known, however, a Surgeon retrieve himself after this error. On one occasion, in cutting a child for stone, he felt convinced that this accident had occurred. He at length succeeded, but after a long time, in getting his finger into the urethra. He then speedily extracted the stone. It was in this case that he first became aware of the danger to which he referred. He had not previously heard of it, and, as far as he knew, it was not mentioned in books. Mr. Fergusson then alluded to the other methods of performing lithotomy. He had cut forty children for stone by the lateral operation, and had lost only one. He felt convinced of the superiority of this operation.

THE ROYAL LONDON OPHTHALMIC HOSPITAL.

DISPLACEMENT OF THE RETINA—EXCISION OF THE EYEBALL—EXAMINATION OF THE GLOBE.

(Under the care of Mr. POLAND.)

In the following case we have an example of detachment of the retina by effusion between it and the choroid. This occurrence, although not very uncommon in adults, in connexion with various morbid processes, is very rarely seen in children, excepting when caused by malignant deposit. In the present instance the exact nature of the deposit must remain somewhat doubtful. It did not resemble the ordinary forms of medullary cancer, nor, on the other hand, could it have been classed with tubercle. The entire absence of pain almost precluded the idea of active inflammation. It will be interesting to watch the further progress of the patient, and to ascertain whether any development of cancer takes place.

Elizabeth M. T., aged 2 years and 9 months, was admitted June 16, under the care of Mr. Poland. She was a remarkably healthy-looking child, and had never, except a trifling cough the previous winter, been ill. She was brought to the

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Hospital because her parents had observed a white substance in "the black of the right eye."

In the pupil, which was slightly larger than the other, and fixed, was seen a yellowish brilliant appearance. The iris was pushed forward somewhat, but not to any great extent; it was not discoloured, and the cornea was clear. After dilating the pupil, it was found that the retina was pushed forwards, and was distinctly seen to be divided into three equal triangular portions. Retinal vessels were clearly seen ramifying on each portion. It is needless to say, that the child was quite blind on this side. The other eye appeared to be perfect. She had had no pain, and the disease was only accidentally discovered by her mother. As there were no urgent symptoms, no treatment was at first adopted. The child was brought now and then, and until November 13 no change was observed. It was that day noted that the pupil was somewhat more dilated, and the masses appeared moveable as if in fluid. The child still remained in perfect general health in every respect.

On January 30 she had an attack of diarrhœa, and there was then some irritability of the eye, and she looked pale and rather feeble. In other respects the eye was the same. She improved again, but towards the middle of March the disease (which, as far the appearance of the mass seen in the pupil indicated, had been from the time of her admission quite stationary) increased, the anterior chamber becoming full of the same matter as was before seen in the pupil.

It was, therefore, decided to remove the eyeball, which was done, the child being under the influence of chloroform. She rapidly recovered, and now (April 20) remains quite well.

The following is Dr. Bader's examination of the eye when removed:—Behind the cornea was seen a reddish-chocolate coloured substance (fluid). A similar kind of substance escaped on opening the eye. The choroid and sclerotic were found in apposition. The retina was funnel-shaped and displaced, the fluid accumulated between the choroid and retina resembling that in the anterior chamber. The choroid at the choroidal aperture, and the portion adjacent to the ora serrata and ciliary processes, was infiltrated by a flocculent substance, which in some places was yellowish-white, opaque, and in others of a chocolate colour, and which, developing in the ciliary processes and iris, had thence filled the anterior chamber. The retina and the optic nerve within the coats of the eye, and about two lines outside the sclerotic, were swollen and infiltrated by the same substance, which occupied the choroid, and thus gave to the retina a flocculent, whitish, opaque appearance. No vitreous humour was found, the space enclosed by the displaced retina being occupied by flocculi of the above substances. The lens was grey and opaque, and its capsule thickened. By the microscope the substance infiltrating all the coats of the eye was seen to consist of cells approaching the size of pus corpuscles, and of granules of different sizes.

Medical Times and Gazette.

SATURDAY, MAY 18.

A FEW WORDS TO HOSPITAL COMMITTEES.

There may be occasions on which it is proper to call an aged lion old, but it is not necessary, at the same time, to prove yourself an ass by kicking the resentless creature in the mouth. Such things, however, are done at this day, in spite of fables. The lash of Æsop is as much wanted as ever. Some of our readers, who also see one of the cotemporary Medical Journals, will remember a recent leading article on Hospital Resignations, which they must have felt to be a disgrace to Medical literature. With such writing in the designedly popular part of the Medical Press, it is no wonder that even country curates, who form their estimate of the Profession at large from what they see of Professional journalism on their visits to the surgery of the village doctor, should give us as a body a contemptuous turn of the shoulder. But we are quite sure that an improving taste is gaining quiet mastery over old cravings. The racy slang of coarse vituperation which used to be applauded in the dissecting-rooms of thirty years back ill suits the tone of our day; and now, when even the force of inveterate habit and mature craft cannot make up for waning powers of dash and spring, the echo of something like that which gave pleasure and passion to the last generation, falls very flat and harmless upon us and those at whom it is aimed. The chief mischief done is a reflex one. The Profession is made to show a tarnished outside to the laity, and we reap tares sown by an enemy in the camp. The condition of Hospital Staffs is, nevertheless, one which requires full discussion, and fair statements will help in this more than loose scurrility.

Our points are, that the number of experts engaged in the work of public Hospitals is too few, both for the welfare of the patients and the requirements of teaching; and that it would be as unwise as ungracious altogether to discard the services of the senior officers of the Staff. We do not say that there are not enough teachers. Of them, if anything, there are too many; and pupils, consequently, are not sufficiently learners. The work of the Physician is over-much diffused for good teaching; and the necessities of teaching are apt, too often and injuriously, to concentrate the energies of the Physician upon isolated points of his duties. If every Hospital is to be made a School of Medicine, we are brought to a state of things quite different from the thoughts of the old founders and benefactors. Now-a-days, of course, we know that in new Hospitals the patients are only necessary appendages of the school; but in the old foundations the original Rules and Staff have little reference to the modern outgrowth of duties. A Staff which could well see, examine, prescribe for, cure if possible, a great number of patients, and give a practical commentary in passing upon their cases to a few zealous Student followers, was in a very much fairer working position than one which is required to diagnose every shade of morbid change, to prognosticate every phase of disease, to solve every therapeutical problem, to analyse every secretion, and to interpret every murmur before a class previously refined into an attitude of finical criticism by a series of special Lectures upon every branch and subdivision of Medical science. When, moreover, those fine-spun Courses of Lectures, running over the space of two or three Sessions, are delivered by the Teacher Physician, unlucky must be the fate of the mass of patients who do not, at the nick of time, come into the required group of illustrations. It never was intended that there should be a triple combination of Physician, Lecturer, and Commentator, or Clinical Professor, and such a conglomeration of duties can only lead to neglect or personal mischief. Some men quickly learn the trick of imperceptibly slackening the traces, and so run through a long career of mediocrity, side by side with relays of others who conscientiously strain at their impossible tasks, and sink, as did the too zealous Charles Coote, under the effort, or give up the work for something which they can accomplish more satisfactorily. Putting aside all interested motives, what would be the answer of any rational and experienced man to the question as to the proper number of Hospital patients as the charge of one Medical Officer. Could it be one hundred? Could it be fifty? And if it were also known that such charge, instead of being the business of life, was only a daily episode, something added on to the struggle for the means of maintenance and position, would not five-and-twenty, or even twenty cases, be thought enough? And, in truth, is it not found to be so? And would not the patients feel it to be so were it not for the intervention of some compensating power in the shape of a scarcely recognised and jealously suspected, but active, Apothecary Assistant? And what true clinical teacher, if outspoken, would ask for more than a few well-selected cases? He may wish for many to choose from, but that is another thing altogether from wishing for the care of many. Typical examples are all that an average Student

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can be made to comprehend. The investigation of complications, modifications, and alternations of disease, must be the work of after years. Our old readers in Anatomy and Medicine, though unconscious of being either Professors or Pathologists, were wise in their generation, and deemed it better to teach elementary matter clearly and well, than to perplex and puzzle the novice by multiplying instances, and confusedly illustrating the intricacies of converging causes and interlacing effects.

Then as to the motley crowd who flock to the consulting rooms of our Hospitals as out-patients, what is to be said for them and their experience? Is it in the power of one man to prescribe for one hundred and fifty different sick people in the course of three hours? The perpetually recurring Rep. or Pt., it is true, may do something towards easing the labour, but who dares acknowledge to himself how often those hieroglyphics have been scrawled to save time and thought, and to lull into an uneasy torpor a conscience not quite callous enough to turn away an applicant for relief with a flat denial, and yet with a Jesuitical twist that would fain self-justify the bad practices of a bad system. The simple fact is, and no man who has made trial can deny it, that, with the means employed, the Hospital work, so ostentatiously paraded before the public as the result of their donations, cannot be done as it ought to be done. It is a delusion to the generous contributors, and a disappointing snare to the sick poor. We intentionally abstain from mentioning individual facts and names. Personalities would do no good in this cause, and only raise up bitter feelings and dangerous jealousies among a class of men serving their generation to the best of their power under the thrall of a crippling system. Details, such as we allude to, are things to be looked after by committees, and the reforms wanted to set all parties right should spring from the central authorities. The plain remedy for all these evils is to enlarge the working staff of Physicians and Surgeons, and so to apportion what has to be done that the juniors, who have experience and tact to acquire, should take the great bulk of the patients under their care, while the senior clinical teachers, whose time of training and probation is already past, should have the power of selecting and managing the small groups of cases required for their immediate purposes. Let the two sets of duties be kept distinct, and great would be the gain to all. Then, under such an arrangement, who but a conceited aspirant, unconscious of the treacherous impotence of his waxen wings, would crave for the dismissal of his seniors? Disappointed, presumptuous precocity may talk of superfluous laggards and obstructive fossilism, but what committee would like to entrust an establishment, for the welfare of which they are responsible, to the restless, reckless, unbalanced judgment of an entirely young staff of officials? In Hospital work especially, we want the steadying influence of age and the craft taught by years of practice, as well as the impetuous tentativeness of youth. Combine all the essential qualifications as largely as possible, but by all means secure an ample training for every one who is to rise to positions of trust. We know we need not exhort those who rule in such matters to honour and retain their senior officers. This they can do with ease and grace by promotion after a certain number of years to the dignified position of Acting Consultants; but it is well for us to give public expression to a sense of the indispensable value of their services, and to a repudiation of such indignities as have lately been thrown at them by part of the Medical press.

THE CHANGE IN THE ARMY MEDICAL WARRANT.

We lately made some remarks on the recent alteration in the terms of the Army Medical Warrant, by which future Regimental and Staff-Surgeons are to be reduced from taking rank with Majors, according to the dates of their respective commissions as the present arrangement is, but are to take rank below them. We pointed out the grounds on which we took exception to this change, and the reason why it had, as might be expected, excited so much dissatisfaction among the Medical Officers of the Army. To these remarks the *Globe* has replied in a semi-official article, which has been copied by several newspapers, in which the complaints referred to are characterised as "very gratuitous grumbling;" while the change in the Warrant is said to have been conceived in a fair and wholesome spirit for the sake of preserving discipline and subordination. The explanation of the circumstances which have led to the revision of the Warrant, appears in the following lines:—

"When the position of the Medical Officers was thus materially improved" (by the Royal Warrant under which the Profession is now constituted) "it soon became apparent that, under the provisions of the Warrant, the Surgeon of a Regiment in the Army, and of a ship in the Navy, would not unfrequently come to be placed in a higher relative position than his own commanding officer. His rank was that of Major in the former, and Commander in the latter, and as the date of the commission was the test of his seniority over any officer of these ranks, it happened that the Surgeon sometimes became the superior of the Major, who not unfrequently commands a regiment, or of the commander, who very frequently commands a ship. This was calculated to interfere with that discipline, which is mainly sustained by having one person invested with decided and unquestionable authority over the particular charge for which he alone is held responsible."

We should be the last to deny the necessity of the responsible Officer being invested with full authority; but we maintain that the pre-existing relative rank of the Surgeons could in no way interfere with this necessity, or its application in practice. Not only Majors, but Lieutenants and Ensigns may be placed in positions of command, and very senior Medical Officers placed under them, as we have seen lately in the Hospital Ships from China. But all such casualties are provided for by the Queen's Regulations. It is laid down in the Chapter on the Classification of Officers, that no Surgeon has any claim whatever to military command, and that the *Officer Commanding*, although he may be junior, is entitled to precedence. In the Medical Warrant itself, with regard to the choice of quarters,—practically the most important part of the advantages attached to relative rank, especially if, as often happens, the Surgeon is married,—the Commanding Officer, however young he may be, cannot be interfered with. It is stated in Clause 17: "But when a Medical Officer is serving with a regiment or detachment, the Officer commanding, though he be junior in rank to such Medical Officer, is entitled to a preference in the choice of quarters." It is thus evident that the relative rank of the Surgeon could not interfere with the position of the Officer in command, whoever he might be. And if the authorities regard the position of the Surgeon in this light, what opinion must they have of the position of Surgeons-Major, who have the rank of Lieutenant-Colonels, and of whom there are many now in the regiments of the Army? Of course, in the same spirit, they must be reduced next. The *Globe* mentions that a similar change is in contemplation in the Navy. We need scarcely remind those who are making these changes, that it is one thing not to give, and another to take away after having given; and we can only raise a voice in warning that, in addition to the vexation and disappointment which these retrograde movements are creating in the Medical Department of the Army, the want of stability which they exhibit, even in the specified terms of a Royal Warrant, is exerting a most deleterious influence among those students of the higher class whose services it would be most advantageous to secure as future Surgeons for the care and proper treatment of the officers and soldiers of our armies.

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THE WEEK.

Mr. Robert Johnston, of 117, Durham-street, Belfast, appeared on the 8th inst. at the Belfast Police Court to answer the charge preferred against him by Surgeon Browne, Hon. Sec. to the Ulster Medical Protective Association,—"That he did wilfully and falsely pretend to be a Surgeon at Belfast, in the County of Antrim, on April 8, 1861, and also on the day previous and on the day subsequent thereto, and did at the same time and place take or use the name or title of Surgeon, he, the said defendant, not being a registered Medical Practitioner within the meaning of the Act 21 and 22 Vic., chap. 90." Our readers will recollect that he attended a woman in her confinement, who afterwards died of tetanus. The solicitor for the prosecution then produced a card containing the following intimation:—

"Mr. R. Johnston,
Surgeon, Accoucheur, &c.
117, Durham-street.
Particular attention given to the Diseases of Women and Children."

The evidence given showed without dispute that he acted as a Medical Practitioner, attended the patient, and took a fee; but there was some doubt whether it was proved that he had wilfully and falsely taken the title of Surgeon; for the woman who got the card could not read, and consequently could not identify it as having proceeded from the defendant. The result was that judgment was postponed in the case for three months, in order to afford the defendant an opportunity of qualifying himself; and if, in the mean time, he should be convicted of practising as a Surgeon, he would be fined in the full penalty of £20 for every such offence.

We have often expressed the opinion that the Profession of Medicine does not discharge its duties to society so long as it confines itself to the work of relieving disease, and does nothing towards preventing it. To us there is something inexpressibly dreary in the sight of the out-patients' Waiting Rooms at Hospitals, filled with squalid applicants who are suffering from poverty, vice, filth, and ignorance, knowing as we do the fact, that beyond the mere alleviation of the present illness, nothing is done, either to lift the poor wretches out of their degraded condition, or to call upon society to do so. The Hospital Report speaks boastingly of the number of *cases* relieved; and there it stops. The Committee are content with transitory palliation, and do nothing towards radical cure. We are therefore gratified beyond measure by the "Report of the Clinical Hospital for Children" at Manchester, an apparently poor and unpretending Institution, which in addition to an unusually good statistical account of diseases, enters fully into the subject of *causes*, and lays before the subscribers the details of the uncleanliness, the impure air, the ignorance of household matters, the neglect of mothers, the poverty, and the intemperance which have contributed to bring upon the patients the diseases for which they have sought relief; and which render their illnesses obstinate, and consequently entail additional cost on the funds of the charity. For example, the state of cleanliness of every patient is noted from actual observation:—

"Of the 533 patients marked, according to the rule adopted, *uncleanly*, 344 were inscribed as *medium cleanly*, and 189 *decidedly bad*. The children of the last-named group were notable for their generally squalid exterior—sallowness of complexion, anxiety of expression, uncleanly state of the skin all over the body, patches of incrustation on the scalp, the head—when a crop of hair existed—infested with vermin, marks of insect bites more or less visible, tumid abdomen, emaciated limbs, fretfulness, etc. The dress is generally unwashed and tattered. The garments and general appearance of the mother usually correspond with those of the child, and the state of their home is in keeping with the rest. Such children labour under disordered digestion, retarded development, rickets, diarrhœa (in winter as well as in summer), thrush, worms, gastric fever, and skin diseases. The length of time during which the patients of these respective groups remain under treatment, even for similar forms of disease, is widely different; those of the class marked *cleanly* being generally soon dismissed cured, while the others remain long on the list, and frequently return for relapses or new forms of ailment."

Next we may give a specimen of the observations on impure and crowded apartments:—

"Case $\frac{4}{7}$.—Cellar residence, very damp but clean, consisting of one apartment only, which serves the purpose of sitting, eating, and sleeping room for six people—sometimes seven or eight—two of the children being frequently absent. The patient, a girl fourteen years old, laboured under sciatica and loss of power of left leg. Under treatment six months—from February to the end of July, when she was still bedfast. She was then carried out to Openshaw, and recovered perfectly in fourteen days without medicine. Father a weaver, earning 10s. per week, sober, six children."

Thus the subscribers are taught the homely lesson, that these miserable squalid residences not only impoverish or destroy those who inhabit them, but entail expenses, whether in the shape of voluntary subscriptions or poor's-rates, on the wealthier part of the community. Squalid houses bring in a good profit to the builder and owner, out of the pockets of the rest of the public. So, if our space permitted, we could go on and quote what is said of the effects of a pernicious diet, of the absence of mothers from their nurslings, and of poverty and mismanagement generally; but we content ourselves with expressing our most emphatic commendation of this "Report." If the Ladies' Sanitary Association want to publish something really useful and truthful, and free from crotchets, let them reprint and circulate it as widely as possible. It would be a new, but a most important feature in the Reports of all charitable Institutions, were they to bring prominently forward—with a view to preventive measures—the conditions out of which spring the evils which such Institutions are designed to counteract.

The case of Mr. Steuart, one of the Members for Cambridge, who left Dr. Winslow's Lunatic Asylum to vote on the question of the Paper Duties, in the House of Commons, has excited much discussion both in and out of the House. The newspapers of Tuesday contain so full an account of the case in the speeches of Mr. Roebuck, Mr. Macaulay, and other members, that, pending the publication of the report of the Commissioners of Lunacy, we have only to put on record the fact, that Mr. Steuart, feeling premonitory symptoms of insanity, applied to Dr. Winslow to be taken care of. Dr. Winslow said the certificates of two Medical men must be obtained before Mr. Steuart could be received in an Asylum. The certificates were obtained. Two Medical men, whose names have not been published, certified that Mr. Steuart was likely to injure himself or others. This was on April 6; but, on May 3, he was allowed, by Dr. Winslow's Resident Superintendent, to leave the Asylum for the purpose of voting in the House of Commons. After the division he returned to the Asylum. We trust the result will be to enable gentlemen threatened with cerebral disease to place themselves under proper care without obtaining a Medical certificate not fully justified by the facts of the case. If Mr. Steuart was a dangerous lunatic, he ought not to have been at liberty. If not a dangerous lunatic, he ought not to have been in Dr. Winslow's Asylum by the authority of any such certificate as that under which he was received and remained there.

It is not usual to criticise a document marked "*Proof—Private—Under Consideration*," and, therefore, we only throw out a hint which may, we trust, be taken in good part by

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those members of the Committee of the Society of Arts who have the private proof under consideration of the Catalogue of Instruments for the Great Exhibition of 1862. The private proof now under consideration certainly looks far more like the trade circular of some French instrument-maker than the publication of a Committee upon surgical instruments in general. We see very little mention of English Surgeons or English instrument-makers; the Germans and Americans are almost ignored; while Maisonneuve, Vidal, Foucaut, Amussat, Sanson, Breschet, Jobert, Leroy, Chassaignac, Sedillot, and many other French Surgeons, and the instrument-maker Charrière, figure on every page. Even the French language is laid under contribution, and we read, to our astonishment, in an English report, such designations as these:—"*Porte-moxa à pression continue*," "*Cupping-glasses à pression*," "*Portes-caustique*," "*Portes-ligatures*" "*Serres nœud*," "*Forceps Emporte-pièce*," "*Catheters à double courant*." Many well-known instruments of English origin are omitted in this proof; and we think the Committee should make their plan well known, and invite communications from our Surgeons and instrument-makers, or we feel quite sure that both will have just cause of offence when it is too late to make amends.

Londoners have very little idea of the debts they owe to the Medical Officers of Health. Here is one specimen from the last Report of the Marylebone district. Dr. Thomson says:—

"In the early part of last year, having directed my attention to the condition of the ornamental water of the Regent's-park, and upon analysis having found it to be very impure, and likewise having been satisfied by experiment that the deposit at the bottom of the water was of an unwholesome character, I instituted inquiries, which led to the conclusion that the drainage of at least three villas terminated in the eastern part of the lake. I communicated with the First Commissioner of Works, made a statement of the circumstances, and requested that measures might be taken to remedy such an unsanitary condition of the Regent's-park. The result has been that the owners of these villas have been required, at considerable expense, to drain into the sewer in Brunswick-place; the plans are nearly prepared, and I am in hopes of being soon able to announce the completion of this important improvement."

In his fifth lecture, on Monday, May 6th, Dr. Beale entered on the theory of morbid growths, which he explained in this manner:—Any tissue may be supposed to have an unlimited potentiality of growth, but, in a normal state, it is restrained by various circumstances, of which the action of the lymphatics, and the growth of the lymph corpuscles within them, whereby excess of nutrient matter is taken up, is probably one. But if the natural limiting powers be interfered with, any tissue may grow. A simple tissue, as the fibrous, may generate a tumour like itself; in the more complex, as muscle, the resemblance soon ceases. Thus, scirrhus of the pylorus appears to begin with an increase of the muscle cells in number; next, they get a fibrous look, although they retain the structural form, just as the muscular fibres of the uterus of the mouse may be seen to shade off into areolar tissue, by every possible gradation. Those structures which naturally grow the fastest may give rise to the most rapid and unrestrainable morbid growths; and in these two parts are distinguishable,—viz., a matrix of exaggerated fibrous tissue, and descendants of the normal gland or tissue cells, in every degree of alteration. Between a *cancer cell* and the natural cell or elementary part of the tissue, there may be every gradation. With regard to the propagation or diffusion of morbid growths, he gave the analogous instance of transplantation of tissues, as of hair, teeth, and periosteum, and expressed his belief that extremely minute spherical portions of the germinal matter may find their way into the blood-vessels and lymphatics, and be deposited and grow in other organs. Germinal matter gives rise to germinal matter, and does not originate in *liquid* blastema. He then gave some illustrations of vegetable tissues, showing a section of potato, with the starch corpuscles rendered visible by iodine, and the germinal matter which lines the cells by carmine, and spoke of starch as a secondary deposit within the elementary parts of the potato. He supposes that the germinal matter, under the influence of vital forces, undergoes change into starchy matter, which then is deposited in the form of the well-known starch corpuscles, layer upon layer, in obedience to physical laws; and he supposes that the mode of deposit of fat in its cells is similar, and that the fatty degeneration of cartilage follows the same laws. After some observations on the canaliculi of bone, which he believed to be caused by, and to be the means of, the access of currents of nutrient liquid, he treated of the amyloid bodies found in certain animal tissues in disease, which he believed to be genuine starch, showing a cross under polarised light, and becoming coloured by iodine. Specimens of liver were exhibited containing some of these bodies coloured, and others uncoloured; and the evidence that they were generated *within* the tissue, and not accidentally deposited upon it, was fully developed. Specimens of potato and mignionette, and of cancer cells from the urine and parotid gland, were exhibited by means of the very convenient portable microscopes.

Sir Benjamin Brodie was again prevented from receiving his guests at the Royal Society last Saturday, although he came to Town in order to do so. The *soirée* was a very interesting one, although much less numerously attended than the previous receptions of Sir B. Brodie.

The Festival of King's College Hospital in the great Hall of Lincoln's Inn on Wednesday, proved to be a very successful one. Some 400 gentlemen seemed to enjoy themselves heartily, and about £3000 were added to the funds of the Charity.

On May 13 Dr. Haviland was unanimously elected Physician to Addenbrooke's Hospital, at Cambridge. Dr. Bayes, the Homœopathist, retired from a contest which the good sense of the Governors rendered hopeless.

SIR B. BRODIE ON THE MARSHALL HALL METHOD.

The Restoration of Persons Apparently Drowned has been attracting so much attention since Dr. Christian's able paper was read before the Medico-Chirurgical Society, that the two following letters from Sir B. Brodie, will be read with interest:—

14, Savile-row, February 13, 1860.

Dear Sir,—I cannot say that I have ever entertained any favourable opinion of what the late Dr. Marshall Hall called his "ready method" of restoring animation. It seems more than probable that the repeated compression of the chest for the purpose of expelling all the air from the lungs would have an injurious effect on the action of the heart. The air drawn into the lungs by the elasticity of the parietes or walls of the chest would fall very short of that inhaled in an ordinary inspiration, and this opinion is confirmed by the experiment described by Dr. Sylvester.

Then the mechanical disturbance occasioned by the continual rolling and tumbling about of the body cannot, I apprehend, be otherwise than mischievous, where the chances of life and death are equally balanced, and must in all cases interfere with the natural process of recovery.

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By the method proposed by Dr. Sylvester, certainly more air would be drawn into the lungs than by that of Dr. Marshall Hall, and with much less disturbance to the body generally. In some animals, as the rabbit, a very sufficient quantity of air can be drawn into the lungs by a similar method, that is, by the mere elevation of the ribs. How far in the human subject Dr. Sylvester's process would be a sufficient substitute for natural respiration, I do not venture to say; it is a question to be determined only by experiment.

Where the apparatus of the Royal Humane Society for the artificial inflation of the lungs is at hand, I have no doubt that this affords the surest and safest means for imitating natural respiration, if the necessary precautions are observed in using it. At the same time, I have also no doubt that the late intelligent Medical Assistant of the Royal Humane Society at Brompton, Dr. Woolley, was correct when he informed me that, practically, the cases of drowned persons in which artificial respiration can be employed with advantage are very few indeed. The first thing to be done is to take the body out of the water as soon as possible, it being always borne in mind that the case is one which admits of no delay as, except under some very rare and peculiar circumstances, there is little chance of life being restored, where the period of complete submersion exceeds three minutes and a-half. The next thing is to do nothing that can interfere with the natural process of recovery. It is only in those cases in which there is no sign of any effort to breathe spontaneously, that artificial respiration should be had recourse to, and it is only in a small proportion of these that it proves successful.

If you, or anyone else, should be desirous of knowing what more I have to say on the subject of the treatment of those who suffer from strangulation or drowning, I would refer you to what I have published in my volume of "Lectures illustrative of certain points in Pathology and Surgery."

I am, Dear Sir, yours truly,
(Signed) B. C. Brodie.

Lambton J. H. Young, Esq.,
Secretary to the Royal Humane Society.

Victoria Hotel, St. Leonards-on-Sea, October 11, 1860.

My Dear Sir,—I observe that the first instruction of the Royal Humane Society, with regard to the treatment of drowned persons is, "that no time should be lost." I conclude, therefore, that these instructions agree with those of the Life-Boat Institution, that there should be no delay in carrying out whatever measures are necessary for the purpose of resuscitation. I also conclude that it never could have been intended that the drowned person should be taken to a house, if a house were not close at hand. The only real difference of opinion, then, seems to be, as to the use of the warm bath, and the method to be adopted with a view to restore respiration. Now, with regard to the first of these points, what is really wanted is, that the body should not lose its natural heat; and whether this be accomplished by dry application or by moist application, as the moisture cannot penetrate beyond the cuticle, would appear to be of small importance; and I own that the practical observations on the use of the warm bath, made by the officers of the Royal Humane Society, seem to me to be more likely to lead us to the truth than the theoretical objections to it made by Dr. Marshall Hall. At the same time, I certainly think it important that the temperature of the bath should be rather below, certainly not above, the natural temperature of the living body.

With regard to the second point, I do not know that I need do more than refer to what I have said on the subject of Dr. Marshall Hall's proposal in a letter which I wrote to you on the subject formerly, and which is printed in one of the Royal Humane Society's Reports (a).

I may, however, take the opportunity of briefly stating:—

1st. That the interval during which artificial respiration can be employed is very limited.

2ndly. That if the Royal Humane Society's apparatus be at hand, and the Medical man present knows how to use it, this affords by far the safest and surest method of imitating natural respiration.

3rdly. That there is great danger that the rolling and tumbling about the body, as proposed by Dr. Marshall Hall, would interfere with the natural process of recovery; at the same time that it is very doubtful whether by this method a sufficient quantity of air could be drawn into the lungs to answer any useful purpose.

4thly. That, at any rate, of the two methods, that of Dr. Sylvester would be more effectual, and much less calculated to do injury.

In the treatment of drowned persons, as in the treatment of disease, the first rule of the Medical art is to do nothing that may interfere with the natural process of recovery. When a drowned person is first taken out of the water, if the heart has not actually ceased acting, there is generally a spontaneous effort to respire; that effort may not be repeated perhaps more than twice in a minute, or even not so often in the first instance. But if the attempt to respire has once begun it will, in the majority of instances, continue, the intervals becoming gradually shorter; and I cannot doubt that such rough usage as that which Dr. Marshall Hall recommended, would interfere with it; although it is not very improbable that, every now and then, some one may recover in spite of it.

With regard to the authorities referred to in favour of the practice of rolling about the body, I may observe:—

1st. That I do not know who are the Medical Bodies referred to as having approved of Dr. Marshall Hall's method. I certainly never heard of the question having been submitted to any of the Medical Colleges or Universities.

2ndly. That I attach little importance to the names of 300 Medical men who are said to have signed a memorial on the subject, knowing as I do how easy it is to procure a great number of signatures to any document when you have two or three names to begin with, and knowing also that the question as to the mode of death from drowning is altogether a physiological one, to which the attention of very few Medical men has been directed, with the exception of those who are actually engaged in teaching Physiology.

I send you these observations in compliance with your request; my conclusions have not been hastily formed. The mode of death from drowning, and the treatment afterwards required, formerly occupied a great deal of my attention, and was the subject of a great number of experiments on animals; but I have not trusted to these alone, having had frequent conversations on the subject with a very experienced and intelligent officer of the Royal Humane Society, the late Dr. Woolley, and since then with Dr. Christian.

Yours truly,
(Signed) B. C. Brodie.

L. J. H. Young, Esq., Secretary.

(a) The letter printed above.

REVIEWS.

The Bath Mineral Waters in Cases of Rheumatism, Sciatica, Gout, etc. By Randle Wilbraham Falconer, M.D., etc., Physician to the Bath General, and Bath United, Hospitals. Pp. 81.

Are the thermal waters of Bath possessed of any virtues over and above those of other more ordinary waters used in the same way and with equal perseverance? Is it worth while for an invalid to subject himself to the inconveniences which may attach to a prolonged absence from home to undergo in that particular city a course of bathing and water-drinking? This is the question which it interests us and our patients to have decided. Dr. Falconer's lament is that the Bath waters "have of late years not been regarded so highly either by the Medical Profession or the public as they ought to be." Possibly he may have no difficulty in calling to mind other once fashionable therapeutic means that have similarly declined in the confidence of the Profession, which, with its educational advancement, asks for better proofs of the efficacy of such remedies than have yet been vouchsafed. Dr. Falconer has, indeed, obtained a glimpse of the proper path to be pursued in investigating the power of these waters, but we cannot say we think he has fairly entered upon it. "Carefully reporting their effects, whether beneficial or otherwise," the collection of cases of disease, and an honest comparison of these cases and the results of their Bath-water treatment, with similar cases treated with warm bathing and water-drinking of a more ordinary kind is what we should look to for convincing the sceptical.

Dr. Falconer's cases are certainly not such as would

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convince us, supposing, for the moment, that we were in the place of the unbeliever. If Dr. Falconer would not appear in the character of a partisan, as one who has prejudged the whole question, let him fairly undertake the comparison we suggest, and we can in the name of the Profession promise him not only a full hearing, but their best thanks in addition. He may depend upon it that this is just the difficulty we all wish to have solved. Should Bath issue triumphant from this trial, the ancient motto, "*Ὕδωρ ἄριστον*," may et replace the "*Ichabod*" now inscribed over her portals.

Meteorological and Medical Observations on the Climate of Egypt, with Practical Hints for Invalid Travellers. By Donald Dalrymple, M.D. Lond., F.R.C.S. Pp. 80.

Doctors rarely fail to be intelligent travellers. Observation is the habit of their daily lives, and with them this habit is a second nature. Checked in the observation of the phases of diseases as presented to them by their patients, their eye finds food, and their minds material for thought, perhaps more readily than is the case with any other class of men. And, what is of greater importance still, the observations thus made, bearing as they naturally do upon the ever-being-solved problem of human existence, have in this very fact an interest and value peculiarly their own. And so Dr. Donald Dalrymple, driven into Egypt by his Physicians, brings back observations on the climate of the Nile, and in the present volume offers them to the acceptance of the Profession with some brief but excellent remarks upon the applicability of the climate to the wants of invalids, and also with what appears to be valuable, because practical, advice to intending visitors.

The book is well written, and will be read with satisfaction. The meteorological observations recorded were made during part of December, 1859, and during January, February, and part of March, 1860. His general results were:—"1st. Very slight variation in the barometer—the greatest range being less than one-third of an inch. 2nd. That the mean temperature of these months is nearly the same as our months of June, July, and August. 3rd. That the moisture of the atmosphere, as compared with that of our summer months of June, July, and August, for the last five years is as 56 to 81, and yet three of these years in England have been remarkable for their dryness."—(P. 6.) The range of the thermometer was, however, very great, as much in February as 50 degrees, but Dr. Dalrymple considers that "it is the regularity of this range which makes it innocuous—it can always be known when it will take place, and, therefore, provided against. The early mornings are cold, so are the late evenings,—too cold for a bronchitic patient, but there is no *need* of exposure to it, either early or late. He *need* not turn out till after breakfast, and can turn into his saloon as the sun sinks below the horizon; all the rest of the day may be safely, pleasantly, and healthfully, employed, *sub jove*."—(P. 25.) Phthisis, bronchitis, asthma, renal disorders, especially the early stage of Bright's disease and over-wrought brain, are the conditions in which he recommends a visit to the Nile.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

EXCERPTA MINORA.

Nitric Acid in Intermittent Fever.—In corroboration of the observations of other Practitioners in the United States, Professor Hammond reports concerning thirty-two cases of intermittent fever treated in Kansas territory with success, by means of nitric acid; this proving equally efficacious with quinine. Ten drops of the acid were given in water three times a-day.—*American Journal of Medical Science*, April, p. 606.

Cherry-Laurel Water in After-pains.—Dr. Rittenhouse desires to call attention to the use of cherry-laurel water in severe after-pains. Given in doses varying from a half-a-drachm to drachm, it will, in the majority of cases, afford almost e relief. In some cases the dose does not require repetition, but in others it has to be given every half-hour until the effect is produced. It is more prompt and certain than opium, and does not produce its stupefying and constipating effects. It was recommended in these cases by Hufeland.—*Ibid.* p. 604.

Ring of Bone in the Axilla.—Dr. Harlan showed a curious specimen at the Philadelphia Pathological Society, which exhibited a distinct, firm, bony ring, including the axillary artery, and the median, ulnar, and musculo-spiral nerves. The ring was found in the middle of the axilla, and had no connexion with the humerus or with the sheath of the artery, but was connected by its posterior surface with the sheath of the musculo-spiral nerve. The history of the specimen, which was met with in a negro of middle age, was unknown. The limb was well developed, and showed no sign of any interference with its function; and there was no adventitious deposit in any other part of the body.—*Ibid.* p. 417.

Iced-water Applications in Croup.—Dr. McFarlane states that having employed this in "at least 200 cases" of croup, he can confidently recommend it. Folds of linen or muslin large enough to cover the whole throat and upper part of the sternum, just sufficiently wet to prevent dripping, should be covered with several thicknesses of dry flannel, the whole being secured by a small handkerchief. When great cold is wanted, two wet cloths should be alternately applied. When the treatment is commenced early, a few hours may suffice to subdue the disease; but in neglected cases several days may be required.—*Ibid.* p. 607.

Glycerine and Camphor for Suppression of the Secretion of Milk.—Dr. Harriss having carefully tried belladonna in cases in which the suppression of the secretion of milk had become desirable, with but little success, now employs in preference a saturated solution of camphor in glycerine, gently applied over the surface of the breast by means of flannel several times a-day. The same solution is also of utility in sore nipples, although Dr. Harriss usually adds four grains of tannin to the ounce. He considers the next best means of preventing threatened abscess of the breast, is to fit the whole gland closely with adhesive plaster, leaving a hole for the nipple.—*North American Med. Chir. Rev.*, March, p. 337.

Chlorate of Potash in Phthisis.—Dr. Fountain, administering the chlorate under the idea of the need of oxygen in phthisis for the counteraction of the influences resulting from imperfect aëration of the blood, reports several cases in which the patients improved under its influence; half-an-ounce being administered at least daily. He concludes—1. The chlorate can be exhibited in large doses every day for a long period without injury. 2. It assists the respiratory function by supplying the blood with oxygen. 3. It acts as a natural tonic, alterative and depurative, by increasing the supply of that element, which is the chief agent in the chemical processes of the system.—*Ibid.* April, p. 352.

Longevity of Celebrated Physicians.—Boerhaave, 70; Haller, 70; Tissot, 70; Gall, 71; Darwin, 72; Vanswieten, 72; Fallopio, 72; Jenner, 75; Heister, 75; Cullen, 78; Galeno, 79; Spallanzani, 79; Harvee, 81; Mead, 81; Duhamel, 82; Asturc, 83; Pinel, 83; Hoffmann, 83; Ribeiro Sanches, 84; Swedenborg, 85; Morgagni, 89; Heberden, 92; Ruysch, 93; Hippocrates, 109.

University of Dublin.—The Examination for the first Medical Exhibition of £20 recently founded by the Professors in the School of Medicine of the University, was held in Trinity College, at the termination of the past Winter Session, and was continued during two several days. The examination on the first day consisted of practical questions, on the second it was *viva voce*. It was open to all Students of three years' standing. The subjects of examination were Practice of Medicine, Surgery, Pathology, Midwifery, and Forensic Medicine. The Exhibition was awarded to Mr. Charles Cameron. The examination for the second Exhibition (£15) will be held in June, and will be open to those who shall have been for two years pupils in the Medical School of the University. Candidates will be examined in Anatomy and Physiology, Chemistry, Materia Medica and Botany. The first two of the four Medical Scholarships recently founded in the University (see *Medical Times and Gazette*, December 1, 1860, page 538) will also be awarded in June.

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FOREIGN CORRESPONDENCE.

PRUSSIA.

Königsberg, May 4.

THE MEDICAL ASSOCIATION AND ITS JOURNAL.

The Association for Scientific Medicine, which was founded here, by a few Physicians, ten years ago, has considerably increased in numbers and influence since that time, as all Professors of Medicine at this University, and nearly all the Doctors of this city belong to it. One of its founders was Professor Helmholtz, who was President of the Society until he left Königsberg. A remarkable interest is attached to the first sitting of this Society, as in it M. Helmholtz made his first communication on the ophthalmoscope, which he had just at that time invented, and gave a demonstration of the method of using the instrument; and it was certainly a favourable omen for the success of the youthful Society, that its first meeting should be inaugurated by the publication of a discovery, which has since then proved to be of the utmost practical importance. The Society, which has now become almost indispensable to all its members, has special sections for Physiology, Medicine, Surgery, Midwifery, etc.; a meeting of one of these sections takes place every fortnight, and the sanitary condition of this city is discussed once every six weeks. Original papers are read, reports given, newly-invented instruments and machines demonstrated, etc. By this means we are able to follow the progress of all departments of science, without the necessity of reading every new work which comes out, or every paper which is published in the journals.

Although the Society has in this respect been very successful, another undertaking connected with it has failed. I allude to the establishment of a special Journal, the *Königsberger Medicinische Jahrbücher*, which was founded here two years ago. It was intended to contain a selection from the original papers read at the meetings of the Society; to give signs of a scientific life in this province of Prussia, which is very much separated from the more active centres of science in Germany; and to act at the same time as a stimulus to such of our colleagues as are dispersed in country places, and to whom the progress of science is all but lost. This was, no doubt, a commendable purpose; but no great foresight was necessary to form a melancholy prognosis for this undertaking. In Germany decentralisation is the rule, not only in politics, but also in every other branch of social and scientific life; an innumerable multitude of Medical year-books, journals, and reviews appear in this country, and many of them are in a very precarious condition; so that a new journal seemed scarcely to be called for. Besides, the plan of the journal was too comprehensive to find many subscribers among Practitioners, who prefer such periodicals as are more particularly devoted to their special departments. To give you an idea of the wide range of our journal, I will only mention the table of contents of one of its numbers:—

"1. Contributions to the Study of the Functions of the Spinal Cord in Frogs.

"2. On the Formation of Pus.

"3. On Sclerosis of the Placenta.

"4. The Membrana Hyaloidea in Fishes and Reptiles.—The Discs and Muscles of Medusa Aurita.

"5. External and Internal Abscess of the Larynx in a Child—Recovery.

"6. The Lactic Acid Theory of Rheumatism and the Experiments of Dr. Richardson.

"7. The Abortive Treatment of Diphtheria, and the Mechanical Removal of Diphtheritic Exudations.

"8. Contributions to Hæmodynamics."

All these subjects are no doubt of great interest, but they are of too diverse a nature to please all the readers of a Medical journal. The number of subscribers, therefore, remained very limited, and the editors had only losses for their trouble; and what was also mortifying to find, the papers published in the journals did not attract any attention, and scarcely any of the valuable communications which appeared in it, were even mentioned in the otherwise complete Year-books of Schmidt, Canstatt, etc.

M. PFLUGER AND THE LATE DR. MARSHALL HALL.

An abstract of one of these papers will certainly interest your readers, as it referred to an illustrious countryman of yours,—Dr. Marshall Hall,—whose researches on the reflex action of the spinal cord have rendered his name immortal, and who has lately been most violently assailed by a very young German physiologist. In 1853 a big monograph, "On the Sensorial Functions of the Spinal Cord of the Vertebrate Animals," appeared in Berlin; it was the maiden work of M. Eduard Pflüger. The bold assertions it contained concerning an independent soul of the medulla spinalis, were soon received as facts into some of the Hand-books of Physiology, and were also related as such from the Chairs of Physiology at some Universities. While Dr. Marshall Hall, in common with nearly all other Physiologists who have written on the subject, attributed sensorial functions to the brain only, M. Pflüger insisted upon the existence of a special sensorium of a lower kind in the spinal cord; and said that this portion of the nervous system was possessed of consciousness and will as well as of reflection and memory. The youthful author judged of the previous researches on this subject, most of which have been made by Dr. Marshall Hall, and of his own discoveries, in a manner, the modesty of which was only equal to its good taste. In the preface he said, "To the work of the English Physician, Dr. M. Hall, 'On Reflex Function,' which has been praised beyond measure by the Germans, the old saying must be applied: 'Whatever of it is true is not new; and what is new is not true.' The same Dr. Hall, who has conceived the unjustified hypothesis of the excito-motor system of nerves; the same man who vainly endeavours, by the most ridiculous arguments, to disprove the existence of sensation in reflex processes; the same whose absurd phrases, called arguments, we shall be obliged to refute, deserves anything at our hands but admiration. In the course of our researches we shall continue to give Dr. Hall the *suum cuique*, etc." M. Pflüger continued in this strain, and seemed quite beside himself with rage, that an English Medical Practitioner, as he often called him, dared to say a word on Physiology. He then goes on to say, "I have settled the question of the central ends of the spinal nerves by showing the sensorial functions of the spinal cord. The experiments I have made are as simple as possible, have been amply repeated, and followed with acute attention from beginning to end; and I have only related in these pages their conclusive results. I have only given what is absolute, decided and entire, in order to satisfy the reader to the best of my ability, and to extinguish any doubts in myself that the results of my experiments may not be quickly confirmed."

What is it now that justifies these bombastic expressions of M. Pflüger? How does he furnish the proof that the spinal cord is not only the pure organ of reflex action of Marshall Hall, but that a special sensorium ought to be attributed to it? He himself declares his experiments to be the most important part of his argument, but the proofs adduced by them were, with one exception, soon shown to be open to grave objections. This one experiment, however, certainly seemed very remarkable, and greatly contributed to a temporary adoption of M. Pflüger's views. He poured a drop or two of acetic acid on the right or left side of the skin on the back in frogs, who had been decapitated, and were lying on the belly. The frog then wiped away the acid with the dorsal surface of the foot of the same side. If the leg of the same side was then amputated, it was observed that, after some purposeless movements of the stump, the foot of the other side was used to wipe away the acid. According to M. Pflüger, this could only be interpreted as an act of conscious reflection.

In the beginning of last year, Dr. Goltz, of this city, published a valuable paper on this subject, written in a calm and impartial manner, in the *Königsberger Medicinische Jahrbücher*, under the title of "Contributions to the Study of the Functions of the Spinal Cord in Frogs." In reviewing M. Pflüger's experiments and reasoning, he gave a due measure of praise to the memory of Dr. Marshall Hall, and also stated that in a large number of carefully-conducted experiments, he had never observed such things to take place as Pflüger had seen in the experiment above alluded to; and that he thought it extremely improbable that it ever occurred. Dr. Goltz amputated frogs, the brains of which had *not* been removed, in the manner described; but even these animals merely

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showed purposeless movements of the stump when tortured as above; nay, after several weeks they did not gain any insight as to a suitable compensation for the lost extremity! It is, therefore, almost impossible that the intelligence of a decapitated frog should be able to find out the right means so surely and quickly, unless the frogs of Berlin, the "metropolis of intelligence," should happen to be more quick-witted than those of Königsberg.

Dr. Goltz has also made some other ingenious experiments which distinctly show that the intelligence of entire frogs is of a very low order. I believe the best proof for the correctness of Dr. Goltz's views, and against the existence of a special spinal soul, to be the circumstance that a decapitated frog will allow himself to be boiled without resistance or evidence of pain; provided that the increase of temperature is very gradual. If a frog is placed in a comfortable position in a vessel filled with water, the water may be heated to a high degree without the frog giving any signs of uneasiness; he dies at 122° to 132° F., in the most complete tranquillity of mind and the full enjoyment of his medullar soul. In the face of such proofs, a very lively imagination is required for assuming a special soul for the medulla spinalis; an imagination, in fact, such as M. Pflüger is gifted with, as is evidenced by his strange ideas on the value of his own experiments and the worthlessness of those of others.

BERLIN, May 6.

ON AMPUTATION BELOW THE ASTRAGALUS.

I will to-day give you a few particulars of an amputation below the astralagus recently performed by Professor Langenbeck, as the views on the value of this operation are not at all settled and many Surgeons still think that Syme's and Pirogoff's operations are preferable to the one just mentioned. The patient on whom Langenbeck did the operation, was a girl of about 17 years, who had suffered from local paralysis of the left leg and foot since childhood; and paralytic club-foot was the consequence. The plantar aponeurosis was contracted, and the tendon of Achilles very tense; in walking, the patient trod upon the os cuboideum and the anterior extremity of the calcaneus. The case was in so far different from those commonly observed, as not only were the peroneal muscles paralysed, but there was a complete anæsthesia of the outer side of the leg and foot; while sensation was normal along the tibialis posticus. There were also extensive ulcerations on that part on which she walked, which healed very slowly. When she came under treatment, at first the tendon of Achilles and the plantar aponeurosis were cut through; but after this the orthopædic treatment could not be carried out, as decubitus always came on, however cautiously the machines were applied; and it took a long time to heal it. The use of machines had therefore to be given up altogether. Manipulations and the starch bandage were then employed, but also without success, as every pressure, however light, caused decubitus. After this treatment had lasted for several months without any beneficial result, Professor Langenbeck, at the request of the patient, made the amputation of the foot below the astragalus. As the upper surface of this bone was displaced, which is generally the case in club-foot, it was feared that it would not return to its right position. The incision was made from the sustentaculum of the astragalus to the maleolus externus, and from there across the back of the foot to the internal malleolus. The joint was then opened between the astragalus and the os naviculare. The tuberositas calcenei was cut out of the heel-cap, and this was united with the cut surface at the anterior side. The whole of the wound did not heal by first intention; but nevertheless the final result was good. There was no anchylosis between the tibia and the astragalus, and the stump was about a quarter of an inch longer than it would have been, if Pirogoff's operation had been performed. The patient is now able to walk about for half-an-hour at a time; and Professor Langenbeck thinks that this operation is preferable to Pirogoff's, if the Surgeon has the choice.

The same Surgeon recently showed us two ivory pegs which had been inserted into the ends of bones in a case of pseudarthrosis, and which, after having remained there for three weeks, showed evident signs of destruction by caries. He could not give a satisfactory explanation of this peculiar phenomenon, but he thought it probable that the juice of the bones dissolved the ivory, and that a larger quantity of it was emitted by the Haversian canals on particular places, on which the carious destruction was consequently greater. However this may be, it goes far to prove the dissolving power of the bone juice, and to render improbable the assertion of M. Miescher, that portions of necrotic bone cannot be absorbed under any circumstances.

ON DIPHTHERITIC PARALYSIS.

An interesting discussion on diphtheritic paralysis took place in a recent meeting of the Medical Society. A paper on this subject was read by Dr. Ebert, in which it was said that although no doubt such palsies had been observed at an earlier period in the large epidemics which had taken place in France, they had only quite recently excited the attention of the Profession. He referred to some cases recently published by Bouillon La Grange, in which not only the soft palate, but also vision, smell, taste, and touch, the throat, œsophagus, and the limbs had been paralysed; and then related a case which had fallen under his own observation. The patient was a boy, in whom the tonsils, the uvula, and soft palate had been the seat of a diphtheritic exudation; at first, an infusion of senna and afterwards a solution of the chloride of potassium was given, and a strong solution of nitrate of silver (fifteen grains to the ounce) was locally applied. Four days afterwards the exudations had entirely disappeared, and at the end of six days not even redness of the parts was to be perceived. The voice was clear and the deglutition not disturbed. A week afterwards the boy, who had recommenced going to school, began to speak in a nasal tone, and on eating, unless he took the food very carefully and in small morsels, it strayed into the nose, and fluids and small bits of food were regurgitated from it. The speech soon became very indistinct, just as is observed in patients with cleft palate. At the same time vision was weakened, so that the patient was unable to read, even for a short time. The ophthalmoscopic and laryngoscopic examinations did not give any results. The tonsils were no longer swollen, but the soft palate and the uvula were seen hanging down; and if a deep inspiration or a movement of deglutition was made, the uvula and palate did not rise. It was evident that local paralysis of the levator palati, and the azygos uvulæ muscles was present. A gargarism of alum was ordered, and the phenomena then slowly decreased, and had quite disappeared five weeks after having first been observed. Dr. Ebert believed that such palsies originated in the same way as rheumatic paralysis; and that a cold would be sufficient to induce paralysis in a patient who had suffered from diphtheritis. He also dwelt on the simultaneity of the paralysis of the nerves of the palate and the eye, and believed this might be explained by the circumstance that the nerves of the palate which arise from the spheno-palatine ganglion, are connected with the optic nerve by some fibres which proceed from the ganglion just named through the fissura orbitalis inferior to the optic nerve.

In the discussion which followed, Professor A. von Graefe denied any connexion between the paralysis and the diphtheritic disease. Cases of paralysis occurred after every grave disease of the nervous system, as typhoid fever, erysipelas, etc.; in diphtheritis, the nervous system was greatly affected, and it was therefore not difficult to trace the origin of the paralysis. He had seen cases of hæmatemesis in which a sudden amaurosis of both eyes had come on. Every disease which was accompanied with fever, was also accompanied with paralysis of accommodation, and a semi-paralytic state of most of the muscles of the eye. He had seen cases of eye diseases which had been ascribed to diphtheritis; but on close examination it had turned out that no diphtheritis had been present, but that the patients had suffered from other acute diseases. It was true that M. Maingault had collected ninety cases of paralysis after diphtheria, in which amaurosis had occurred thirty times, and paralysis of the palate sixty times; but if the large number of epidemics which had been observed in France was considered, the number of cases of paralysis was very small when compared with the frequent occurrence of palsy after other grave diseases. The connexion between the spheno-palatine ganglion and the optic nerve was not sufficiently proved; but even if there was such a connexion, it would still be difficult to explain by it the origin of amaurosis, as it was not to be conceived, how the special energy of the optic nerve could be destroyed in consequence of it. Dr. Ebert, in reply, believed

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that the beneficial action of electricity in cases of paralysis after diphtheria spoke rather for the local origin of the disease.

ON THE ANTAGONISTIC ACTION OF OPIUM AND BELLADONNA.

At another meeting of the same Society, Professor A. von Graefe communicated some of his observations on the antagonistic action of opium and belladonna after having been injected into the cellular tissue. When a solution of atropine has been injected hypodermatically, three or four minutes afterwards the pupil becomes dilated, the pulse rises to 140—160, and other symptoms of narcosis by atropine are observed. If morphia is then injected, all these phenomena, which would otherwise last for hours, disappear in a very short time. After a hypodermatic injection of morphia, a considerable myosis is observed and the pupil cannot be dilated. This is probably to be ascribed to an active irritation in the sphincter muscle, just as mydriasis caused by belladonna is to be explained by active irritation of the dilatator muscle. A new fact, which von Graefe has observed, is the antagonistic action of these medicines upon the faculty of accommodation; although it has not occurred in all the cases in which he has operated. *Atropine causes a paralysis, and morphia a spasm of accommodation.* In consequence of this the space allowed to accommodation becomes greatly limited, and myopia is the result. All distant objects are indistinctly seen; but if concave glasses are used, this is obviated. It is true that the myopia is not so considerable as it appears to be when trials on both eyes are made; as if only one eye is experimented upon, distant objects are more clearly distinguished; a circumstance which is, no doubt, due to the weakening action of morphia upon the internal muscles of the eye. But the phenomenon is only temporary, and is generally only observed three-quarters of an hour after the injection. It is probable that, if a stronger dose of morphia were used, it would last longer and also be more constant; but it would not be justifiable to do this in order to satisfy physiological curiosity. The symptoms described are to be explained in the following manner: opium and belladonna have an antagonistic effect upon the muscular fibres of the tensor chorioideæ, as upon the muscles of the iris; and the analogy would be quite complete, if a double and antagonistic innervation of the tensor choroideæ, by both the third pair and the sympathetic nerve was just as certain as it is for the iris.

PROFESSOR VIRCHOW ON WARTY ULCERS.

Professor Virchow recently made some remarks on warty ulcers, a peculiar form of ulcers which had been first described by M. Marjolin, and afterwards by some English authors, especially by Messrs. Hawkins and Robert Smith, who had discussed the question whether they were cancerous or benign ulcers, and had only a firm warty surface instead of being covered with soft granulations. M. Virchow had lately seen some ulcers of this kind, which had a malignant appearance, and one which had not. One part of them was similar to the cancroid ulcers, and their surface appeared much as that of a carcinoma labiorum. These ulcers are generally observed on the upper and lower extremities. The real question at issue is, how the irregular aspect of the surface is produced; whether the prominences are real neoplasms emanating from the surface, or, as in cancroid ulcers, mere remains of original tissue, between which the malignant growths are developed, and being prominent over them, gain a warty appearance. In the majority of cases there can be no doubt that the formation does not merely arise from the surface, as was formerly believed to be the case with epidermoidal cancer; but the change evidently affects a number of tissues, viz., the cutis, the cellular tissue, the periosteum, and even the interior of the bones. Their development cannot therefore be due to atrophy; besides, the ulcerations often yield a considerable secretion. In some cases there is a cancroid aspect even in the bones. M. Virchow had lately a patient under his care, who suffered from warty ulcer on the heel, and on whom, as it did not heal, Syme's operation was performed; but the anatomical examination of it did not give satisfactory results. M. Virchow said that we had not yet extended our knowledge in this respect beyond what had been done by the first observers; as it was not decided whether the warty ulcer was an originally malignant growth, or a benign metamorphosis of ulcers, or a malignant metamorphosis of fistulous ulcers.

Professor Langenbeck said that he did not think that warty ulcers were of a cancerous nature. They were seen on the skin of the sole of the heel, at the plantar surface of the foot, and the capitula ossium metatarsi, and sometimes seemed to arise from corns which pressed through to the bones. Such was the "*mal perforant du pied*" of the French. Besides, they were observed where necrosis of bones existed. Although melanotic cancer is very frequent on the foot, Professor Langenbeck has never seen it arise from warty ulcers. Perhaps the latter are layers of epidermis, formed in consequence of a cure having been retarded or become impossible. Ulcerations of bones are sometimes seen which will not heal, and from which whitish masses, like round pegs, which consist of epidermis, can be extracted. The only method of treatment which can afford benefit in such cases, is the resection of the surface of the bone, as even the actual cautery generally fails to produce a curative effect.

GENERAL CORRESPONDENCE.

DR. DRUITT'S CASE OF DISTORTED PELVIS.

LETTER FROM DR. ROBERT LEE.

[To the Editor of the Medical Times and Gazette.]

SIR,—Will you oblige me by inserting in the next number of your Journal the following case published in the first volume of the *Obstetric Transactions*:—

"On January 20, 1859, at 3 a.m., I was summoned to see Mrs. P., who had been in labour many hours.

"I found the patient a tall, healthy-looking Irish woman, aged 32. She had been married at eighteen, and this was her sixth pregnancy. All her foregoing labours had been very tedious; her first produced a boy living; her second and third a boy and girl dead; her fourth and fifth two girls living. The present labour had begun on Tuesday, the 18th, at 9 p.m.; the liquor amnii was discharged on Wednesday, the 19th, at 2 p.m., and hard labour had been going on for thirteen hours from the rupture of the membranes to the time of my visit. She had taken one dose of ergot, and the forceps had been introduced and traction made therewith at intervals during the last five hours.

"On examination the external passages were found cool and dilated, and the forceps remained applied to the head, which had not passed the brim of the pelvis. No force that I employed had any effect.

"As it was clear that natural delivery was not to be expected, and as there was no apparent use in delay, and as the forceps and ergot had been administered unavailingly, the question became one of craniotomy or turning; and in the hope of saving the child's life I decided to turn.

"The bladder and rectum were therefore again emptied, and chloroform was administered. I proceeded to turn. The womb, as might be expected, very firmly embraced every part of the child, and contracted forcibly at regular intervals, but the right foot was soon reached and brought down. The turn, however, could not be effected without bringing down both feet, when the nates and abdomen were expelled by the uterine efforts. But now no effort or manœuvre, nor justifiable use of force enabled me to bring the head into the pelvis or bring down the right arm; and in the meanwhile the infant, from the impression of the cold air, began to make ineffectual efforts at breathing, meconium passed abundantly, and the cord ceased to beat. And now began a new dilemma in the shape of hæmorrhage, which occurred into the womb at each interval of relaxation, the blood being expelled in dangerously large gushes at each contraction. Under this new complication there was nothing to be done but to terminate the labour by craniotomy; so the occiput was perforated, the brain washed out, the cranial bones crushed inwards, and the head extracted. The placenta followed, the bleeding ceased, and the patient recovered without an ill symptom.

"So far as I could measure with my finger, the promontory of the sacrum projected forwards, and the symphysis pubis backwards, leaving not more than three inches between them. The child's head was firmly ossified and hard as a cocoa-nut; its circumference was fifteen and a-half inches. It was a female.

"In this patient there was clearly such a degree of contrac-

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tion as would render the passage of the fœtal head difficult if of ordinary dimensions, and impossible if unusually large. It is just the case, therefore, in which a child's life may be saved, and a barbarous operation averted by inducing labour prematurely if this poor woman should have the misfortune to become pregnant."

It is impossible to peruse this case without coming to the conclusion that Dr. Druitt has had little or no experience in cases of difficult labour from distortion of the pelvis. If he had possessed a slight practical knowledge of Midwifery, he would have discovered, when first called to the patient, that the pelvis was distorted, that the ergot of rye had been improperly administered, and the long forceps applied where nothing but mischief could result from the employment of the instrument. "The forceps had been introduced," he says, "and traction made therewith at intervals during the last five hours." "On examination," he adds, "the external passages were found cool and dilated, and the forceps remained applied to the head, which had not passed the brim of the pelvis. No force that I employed had any effect." "The external passages" must have been dilated with the forceps, for the head had not passed the brim. Would any man with the most slender practical knowledge of Midwifery have expected after five mortal hours' pulling with the forceps that natural delivery could take place, or that the life of the child could be preserved by the operation of turning? What followed it is unnecessary to repeat. Dr. Druitt may thank his stars that the woman did not die from ruptured uterus or uterine hæmorrhage induced by the dangerous and, in my opinion, unjustifiable treatment subsequently employed. Had this happened, a coroner's inquest must have taken place. The paper, or case, it appears was published to illustrate the new doctrine, that craniotomy must be abolished in the practice of Midwifery. In stigmatising this necessary operation in cases of distortion of the pelvis as a barbarous operation where the induction of premature labour has not been had recourse to, Dr. Druitt, to prevent this poor creature from dying undelivered, was compelled at last to have recourse to the very barbarous remedy he had denounced. The publication of this case cannot fail to make some young men "cowards," when they pass up their hands into the uterus to turn under chloroform in cases of distorted pelvis.

Dr. Druitt's case of distorted pelvis was treated, first, with ergot of rye; secondly, with the long forceps for five hours; thirdly, with chloroform,—to what extent is not revealed; fourthly, with turning, which could not be completed; and fifthly, with the "barbarous" operation of craniotomy in the back part of the head. This case illustrates in the most convincing manner the correctness of all the principles taught in my Lectures and writings respecting the methods of treatment which ought to be adopted in cases of difficult labour from distortion of the pelvis. The principles which I have taught on this subject differ in no important respect from those so clearly pointed out by Dr. Denman, Dr. Collins, Dr. Merriman, and all the great practical writers on Midwifery who have appeared during the present century. To defend their doctrines is the duty of all who are placed in the public position I hold. Being much older than Dr. Druitt, and, I believe, much more experienced in the practice of Midwifery, perhaps he will forgive me for recommending to him a careful perusal of Dr. Denman's "Introduction."

I am, &c.

R. Lee.

POOR-LAW MEDICAL REFORM.

Letter from Dr. Fowler.

[To the Editor of the Medical Times and Gazette.]

Sir,—I beg to forward you the following Resolution, unanimously adopted at a meeting of the Metropolitan Poor-law Medical Officers, held on Friday, the 10th inst., at the rooms of the Royal Medical Benevolent College, 37, Soho-square, and to respectfully solicit the insertion in your next impression of the accompanying condensed copy of the statement and addendum alluded to.

I am, &c.

Robert Fowler, M.D. Ed., Hon. Sec.

145, Bishopsgate-street Without,
May 11.

Resolution III.—"That the Honorary Secretary be requested to forward a condensed copy of this statement to each of the four weekly Medical journals, respectfully soliciting the several Editors to insert the same in their next impressions, together with an addendum, asking all the Poor-law Medical Officers to forward, within the course of one week, to the Honorary Secretary, any facts within their respective experience bearing on the suggestions of this statement; and, moreover, that the thanks of this meeting be accorded to the Medical Press, for their continued advocacy of the claims of the Poor-law Medical Officers."

POOR-LAW MEDICAL REFORM.

At a public meeting of the Metropolitan Poor-law Medical Officers, held on May 10, at the rooms of the Royal Medical Benevolent College, 37, Soho-square, it was unanimously resolved to adopt as the embodiment of their collective opinions the following statement (here condensed), submitted to them by their Committee. It was also further resolved, that all the Union Medical Officers should, through the several weekly Medical Journals, be solicited to forward, within the course of one week, to the Honorary Secretary, Dr. Robert Fowler, 145, Bishopsgate-street Without, any facts within their respective experience bearing on the suggestions of such statement, with a view to the said facts being laid as evidence before the Parliamentary Poor-law Committee:—

"The Committee of the Metropolitan Poor-law Medical Officers, having maturely considered the subject of Poor-law Medical Relief, in so far as it affects the position of the Medical Officers and the interests of the sick poor, are of opinion that the present system of administration of Medical relief requires amendment.

"They submit the following suggestions as indicating the defects of the system, and the means for remedying the same; and recommend that evidence of as comprehensive a nature as possible be solicited from the Poor-law Medical Officers, having reference to such suggestions, which evidence may be ultimately submitted to the Parliamentary Poor-law Committee.

"*Suggestion A.—As Regards the Sick Poor.*

"1. That it is a source of injury to the poor, and a false economy to the ratepayers, for Poor-law Guardians to make cheapness a ruling guide in their election of Medical Officer.

"2. That, in order to insure to the sick poor the full benefit of Medical aid, the appointment of Poor-law Medical Officer should be, in all cases, made permanent.

"3. That, for the same object, the Medical Officer of a district should have the power, in common with the Medical Officer of a workhouse, of ordering in writing whatever necessary diet or clothing he may think required for any pauper under his care, and that it should be the duty of the Relieving Officer to obey such order.

"4. That, in some rural districts, the distance between the poor and the Relieving Officer, or between the Relieving Officer and the Medical Officer, is too great, thereby causing the poor to travel an unnecessarily long distance for Medical aid. The remedies for this are two; viz. 1, Either to extend the power of giving orders to other parochial officials besides the Relieving Officer; 2, Or by arranging that the Relieving Officer shall live, whenever such is practicable, within one mile of the residence of the Medical Officer.

"*Suggestion B.—As Regards the Medical Officer.*

"1. In common fairness to the Medical Officer, his appointment should be made, in all cases, permanent.

"2. That the present system of remuneration of the Medical Officer is without any uniformity, equality, or any definite principle, some officers being paid by a fixed salary and extras; some by a fixed salary without extras; a small number by the case; but the great majority are paid by a fixed salary, which usually bears no relative proportion to the amount of work performed. That the mode of payment by a gross fixed salary admits of the infliction of a great injustice on the Medical officer, by the indiscriminate issue of orders which takes place.

"3. That, in the great majority of instances, the remuneration of the Medical Officer is inadequate for the services performed.

"4. That the only just and equitable mode of payment is by a certain fixed sum per case, in accordance with the recom-

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mendation of the Poor-law Commissioners in their Minute, dated June 6, 1839.

"5. That, at a minimum computation, no less a sum than 2s. 6d. per case in the Metropolis, and than 5s. in the Provinces, can compensate the Medical Officer for his services.

"6. That the Medical Officer of a Workhouse should be paid to the same extent, both with reference to salary and to vaccination, fees, and other extras, as the District Medical Officer.

"7. That the list of 'operations and services,' detailed in Article 177 of the General Consolidated Order requires augmentation.

"8. That the Medical Officers, in consideration of the vast and important duties performed by them, the discomfort and difficulty, and the great personal risk of life to which the performance of those duties exposes them, together with the minimum remuneration which they now seek, are fairly entitled to a superannuation allowance, in common with the members of the civil service.

"9. That, in order to facilitate the carrying out of the foregoing suggestions and recommendations, it is highly necessary that the powers of the Poor-law Board be consolidated and extended, especially those relating to the Poor-law Medical Officers and the sick poor."

INTERNAL ADMINISTRATION OF CHLOROFORM.

Letter from Mr. Squire.

[To the Editor of the Medical Times and Gazette.]

Sir,—In the *Medical Times and Gazette* of April 27, 1861, page 450, you have given an abstract of a paper from the *Journal de Pharmacie*, on the use of glycerine in the internal employment of chloroform, by M. Bonnet, Pharmacien to one of the Paris Hospitals, who, it appears, has tried various means "of remedying the inconveniences which attend the ordinary mode of prescribing chloroform for internal use, seeing that in consequence of its insolubility in ordinary vehicles, it is administered equably only with difficulty. He finds that mixing equal parts of chloroform and the finest glycerine in a mortar, until the droplets of chloroform cease to be visible, completely answers the end. When water or other adjuvant is added, a limpid fluid is produced, which exhibits no sign of separation, even when more than 100 parts, by weight, of chloroform are added to distilled water. It is essential for this that the glycerine should be perfectly pure. Sulphuric ether may be administered in the same way. For external application chloroform should be combined in the same way, a larger proportion being caused to be taken up by more rubbing. This preparation of the chloroform prevents the painful irritation which sometimes ensues on its application."

As I happened to be engaged upon some experiments with chlorform when the above came under my notice, I made trial of M. Bonnet's suggestion. For this purpose, half a fluid ounce of Duncan's chloroform, sp. gr. 1497, was triturated in a mortar with an equal quantity of Smith's pure anhydrous glycerine, and it was not until the rubbing had been dexterously continued for ten minutes that the droplets of chloroform disappeared. The resulting product measured scarcely five drachms, so that at least 75 per cent. of the chloroform had been lost in the process. When this mixture of glycerine and chloroform was mixed with water, the chloroform quickly separated and fell to the bottom.

It would seem from this, that the disappearance of the droplets is chiefly due to the evaporation of the chloroform, and, if the rubbing be carelessly performed, or the time much protracted, the glycerine would, at the end of the rubbing, be sufficiently pure for a second experiment, and, as such, miscible with water and harmless as an external application.

Ether submitted to trituration is open to the same objection.

When one measure of chloroform is mixed with nine parts of rectified spirit, it becomes what is termed "chloric ether," and mixes with water without depositing chloroform; for instance, a fluid half-drachm of chloric ether—three drops of chloroform—makes a perfectly clear solution with a fluid ounce of distilled water, and will not separate on standing, and is, I think, unobjectionable for internal uses.

Chloroform for external use may be mixed with any proportion of olive-oil without separation.

It may also be shaken up with an equal measure, or more, of white of egg, and forms, under these circumstances, an excellent semi-solid application for rheumatism.

Chloroform will dissolve any quantity of camphor; it will not mix with pure glycerine, but it mixes with ether, rectified spirit, and spirit of turpentine, and the mixture remains transparent.

I am, &c.

P. Squire.

277, Oxford-street, May 13.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

Tuesday, May 7, 1861.

Dr. Copland, President, in the Chair.

Dr. Peacock made a communication to the Society on the

specific gravity of the healthy adult brain.

The mode in which his observations were conducted, was first to weigh the whole organ and its several parts in air, and then in distilled water; and so to calculate the specific gravity. In these respects his observations differed from those made by others, who had employed solutions of common or Epsom salt of ascertained density, into which portions of brain had been placed. The results arrived at by Dr. Peacock were, that in the healthy adult the mean specific gravity of the cerebrum was 1·03488; cerebellum, 1·04162; pons and medulla, 1·04006; encephalon, 1·03633. In the healthy adult female the specific gravity of the cerebrum was 1·0351; cerebellum, 1·03952; pons and medulla, 1·0406; encephalon, 1·03616. Dr. Peacock also mentioned some observations on the specific gravity of the brain in young persons, and in cerebral disease; but they were too few to have any deductions drawn from them.

The President agreed with Dr. Peacock, that the idea of the size of the brain continuing the same in adolescence as in childhood, was erroneous. The size of the cranium increased up to the age of twenty-five years; it was therefore very likely that the brain also increased in size. He believed, also, that in persons who had been educated from early youth, the forehead increased in size, and that this was in proportion to the increase in size of the anterior part of the brain.

Dr. Crisp wished to ask Dr. Peacock if he could trace any relation between the specific gravity of the brain and the intellectual faculties?

Dr. Peacock stated that his observations were too few to draw any exact conclusions. He mentioned a case in which there was large intellectual development, and a brain only weighing thirty-three ounces.

Dr. Peacock also exhibited a large

calcified tumour from the abdomen.

It had been forwarded to him by Dr. Thurnam, of the Wilts County Asylum. The tumour was removed from the abdomen of a female, 90 years of age, and weighed three and a-half pounds. It was stated by Dr. Thurnam to have had no connexion with the uterus, but might possibly have been ovarian.

Dr. Bristowe, after looking at the tumour, believed that it was in all probability of uterine origin.

Dr. Bristowe and Dr. Peacock were requested to furnish a further report on it.

excision of the entire tongue for epithelioma.

Mr. Henry Thompson exhibited for Dr. Fiddes, of Kingston, Jamaica, the entire tongue, removed by that gentleman from a man of middle age, in December last. He believed that any other operation than that of complete excision would not remove the disease, and he therefore adopted the method which Mr. Syme had previously employed, viz., of cutting through the lip and lower jaw in the middle line, and having drawn them well apart, and the tongue well outwards, dividing by means of blunt-pointed scissors and a bistoury

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the attachments close to the hyoid bone, and with the mucous membranes of the mouth and fauces. He took care to cut and tie one lingual artery before dividing the other. This was the second successful case by Dr. Fiddes. In both the function of taste and the power to articulate had been partially restored as the patient recovered. The first case was reported in the *Edinburgh Medical Journal* for 1859. Dr. Fiddes had sent this specimen over for presentation to the Society, in part to announce the success of the proceeding, and in part to ask that a special report on the nature of the disease might be made.

Mr. Henry Thompson, Mr. Hutchinson, and Mr. Lawson were requested to furnish a report on the case.

Mr. Hutchinson remarked that although Surgical Science was undoubtedly much indebted to Dr. Fiddes for his additional demonstration that excision of the entire tongue might be accomplished with safety, yet he could not but feel much doubt as to whether so formidable a procedure had been necessary in the present instance. The ulcer was a small one, limited to the right side, and not extending far back. He thought that to have removed less than half the organ in an oblique direction, would have been quite sufficient. Epithelial cancer was not one of those forms of malignant disease in which removal of the entire organ was essential. It was most desirable to excise widely, say at half-an-inch distance from the borders of the disease; but to do this was probably quite as good security against recurrence, as to remove the organ. A case had occurred to himself, in which he removed about two-thirds of the tongue on account of cancerous ulceration far more extensive than in the specimen shown. The gentleman never had any return of disease in the scar, thus proving that nothing could have been gained by removal of the whole tongue. He died, however, eighteen months after the operation, of disease of the glands of the neck.

Mr. Lee said that the question as to the advisability of removing the whole or part of the tongue, was one which Mr. Hutchinson would be able to answer in his report; as it was a question as to how far the disease had infiltrated the substance of the tongue beyond the apparent ulcer or not.

Mr. Henry Thompson also showed

NUMEROUS PROSTATIC CALCULI,

which were removed from a man aged 89 years, who died recently. He had been the subject of hemiplegia for thirteen years, and during the last few months of his life had been bed-ridden. At the post mortem, the right hemisphere of the cerebrum was found to be softened throughout, and traces of an old blood clot were found in the corpus striatum. The arteries at the base of the brain were much thickened, and indurated with calcified deposit in their coats. There was a small phosphatic calculus in the right kidney; the left had numerous small cysts in its substance. The bladder was thickened and fasciculated, and the prostate somewhat enlarged. Occupying a cavity in each lateral lobe, and also immediately beneath the veru montanum, were numerous dark coloured calculi, very hard in texture, with polished surfaces, and each having several irregular facets, varying from the size of a grain of pearl barley to that of a pea. These characters distinguish them completely from calculi of renal or of vesical origin, and they might be contrasted advantageously with some calculi encysted near to the neck of the bladder, which he had exhibited before, and which were of uric acid formation. The present were phosphate and carbonate of lime.

Dr. Hermann Weber exhibited

THE BRAIN FROM A CHILD AFFECTED WITH CHRONIC HYDROCEPHALUS.

The enlargement of the head took place after birth, and was observed first in the fifth month. In the eleventh month the circumference was twenty-three and a-quarter inches; the distance from the upper insertion of one ear to that of the other, seventeen and three-quarter inches; that from the root of the nose to the occipital protuberance, seventeen inches. Other plans of treatment having failed, six ounces of fluid were removed by puncture, and slight compression was applied afterwards. Symptoms of inflammatory irritation came on a few days later, and the child died five weeks after the operation. The cranial bones were extremely thin, exhibiting insular spots of want of ossification. The fontanelles and sutures were widely open. The lateral ventricles and the third ventricle of the brain, forming one cavity, were enormously distended by fluid amounting to seven pounds eight ounces, being sixteen times more than the weight of the brain-substance. The lining membrane of the ventricles was much thickened. The convolutions on the superior surface of the hemispheres were completely effaced. The brain substance forming the roof of the ventricles was on some points scarcely thicker than the lining membrane of the ventricles. There was only a feeble trace of the corpus callosum, and none of the fornix and pineal gland. The corpora quadrigemina were transformed into a hollow bag. The iter a tertio ad quartum ventriculum was open, yet the fourth ventricle was not distended. The site of the infundibulum and of the corpora albicantia was occupied by a large bag with thin walls. Dr. Hermann Weber pointed out that no method of treatment could have had much chance with such a condition of the brain.

Mr. Flower then exhibited numerous specimens illustrating the subject of

DISLOCATION AT THE SHOULDER JOINT.

He had, since reading a paper on the same subject before the Medico-Chirurgical Society, examined all the specimens in the museums in London. In most of them there was no history. The great point was to ascertain whether the so-called dislocations were from accidents or injury. The only disease which could be confounded with it was chronic rheumatic arthritis, and then the apparent dislocation was from widening of the socket rather than from actual displacement of the head of the humerus. He considered those only to be true cases of dislocation in which there was a new and independent socket formed, and of these there were only forty specimens. His object was to ascertain the exact position of the head of the bone. Is it below the glenoid cavity, as generally described? He believed not, but that the head of the bone was drawn up under the coracoid process. He had seen no genuine case of sub-clavicular dislocation. The cases thus described were sub-coracoid.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, May 1, 1861.

Dr. Tyler Smith, President, in the Chair.

Dr. Druitt exhibited specimens of a liquid and solid extract of beef, made under his directions by Brand, of Little Stanhope-street, Mayfair. He observed that, next to brandy, no remedy was so essential in the treatment of debility from flooding as the true essence of meat; and, besides, he claimed the credit of introducing this as a remedy for intense nervous exhaustion, arising from any cause whatever, whether from grief or mental disturbance, and believed that it possessed stimulating effects on the brain. The liquid essence is the pure juice of beef, prepared by heat, of a clear amber colour, and aromatic smell. It contains scarcely any gelatinous matter. The solid extract is made by drying the fluid at a gentle heat, and may be kept a long time without spoiling.

Dr. Meadows exhibited a Pelvimeter, the invention of Mr. Earle, which promised to be useful in practice. He also directed the attention of the Fellows to the heart of a child, two years old, who had died from idiopathic pericarditis.

A Paper, by Dr. Priestley, was read, on the

TREATMENT OF CASES OF ABORTION IN WHICH THE MEMBRANES AND PLACENTA ARE RETAINED.

The author began by observing that when abortion occurs in the early weeks, the ovum is frequently expelled without rupture of any of the membranes except the external decidua, because the attachments to the uterine cavity are unstable; the mass is then smaller and less difficult to push through the os uteri, and the contractile power of the uterus is very feeble. In the third, fourth, and fifth months the decidual cavity is obliterated, the placenta has acquired more intimate attachments to the womb, and the contractile power of the uterus being greater, rupture of the membranes commonly takes place before expulsion. The embryo having escaped, the secundines may speedily follow, or, lying in the os uteri, they

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may be removed by the finger or some simple instrument. In a considerable number of abortions, however, in which the fœtus and liquor amnii have been voided, the secundines are not soon extruded; and after the uterus has made repeated ineffectual attempts to expel them the os uteri closes and action ceases. Instances of this kind are common in obstetric practice, and are often a source of much embarrassment to the Practitioner. Obstetric authorities differ widely as to the treatment which ought to be adopted when the secundines are not thrown off spontaneously, and particularly as to the propriety of manual interference. Dr. Denman, Dr. Davis, Dr. Ramsbotham, and Dr. Dewees deprecate any attempts at extraction by the hand; and Mr. Ingleby held that "no manual extraction can be effected prior to the sixth month." Dr. Burnes and Dr. Churchill regard interference in this way as only allowable in exceptional cases; and Dr. Tyler Smith stands almost alone in recommending the removal of the secundines in all cases of abortion where they are retained. The author regarded the question of treatment as an important one to all obstetric practitioners, as they might be blamed, on the one hand, for omitting a duty they ought to have performed, or on the other hand they might be charged with meddlesome practice. He had met with a considerable number of patients who had seriously suffered from placental retention, and this had induced him to bring the subject before the Society for the purpose of eliciting opinions as to the proper course which ought to be followed. The dangers and morbid conditions arising from membranous and placental retention were stated to be:—1. Flooding; this being sometimes of a very serious character, and the patient being always liable to hæmorrhage so long as a fragment remains. 2. Decomposition of the uterine contents, leading to local inflammation of the uterus and surrounding tissues, to phlebitis and phlegmasia dolens, and lastly to general poisoning of the system, as evidenced by irritative fever, peritonitis, rheumatic pains, the formation of abscesses, and even the occurrence of death. 3. Sub-involution of the uterus. 4. The generation of some of the forms of mole out of the tissue left in the uterine cavity, and the hæmorrhage attending the presence and expulsion of these morbid growths. The entire absorption of the placenta was regarded as uncertain and not to be counted upon. Cases illustrative of the several sources of danger were detailed. In considering the various methods of treatment which have been recommended, the author's experience led him to believe that the effect of the administration of ergot was very uncertain, and that galvanism and injection of water were not to be depended upon. Any form of abortion-forceps which must needs be pushed beyond the reach of the finger he regarded as useless and dangerous. He was thus driven to the conclusion that the introduction of one or two fingers into the uterus was the safest and best way to remove the retained uterine contents. In his hands such manual interference had never been followed by any evil results, and a considerable number of cases had fallen under his observation. He begged particularly to be understood as not advocating rash and violent attempts to empty the uterus. Rough and careless manipulation might be fatal to a patient; but the consequences of placental retention were so serious that, under ordinary circumstances, less risk was incurred by the operation. It was important to effect removal, not only before putrescence began, but before the os uteri became much contracted; and if in six hours after the escape of the embryo the placenta did not follow, it might be removed. The extraction might be effected sooner than this if much hæmorrhage were present. He had found it convenient in operations to place the patient on the back, with the thighs flexed on the abdomen; and while one hand steadied and depressed the uterus externally, the other was with all possible gentleness passed into the vagina. The os uteri was then dilated with the index-finger, and the second finger followed if required. These two fingers formed the best and most sensitive forceps, and although time and care might be necessary to their introduction, their employment was most satisfactory. The administration of chloroform previous to the manipulation afforded great assistance by relaxing the passages and saving the patient from pain. The Author had succeeded in removing the placenta with the hand in some cases days and weeks after the escape of the fœtus; but he had never ventured on any such attempt if inflammatory symptoms and irritative fever had already set in. Where the os uteri was too contracted to permit the introduction of the finger for the removal of a placental mass, its dilatation could be effected by sponge tents, which had the double advantage of staying hæmorrhage and facilitating the passage of the finger.

Mr. Robins stated a case in which there was much flooding, owing to retained placenta, after abortion at the third month. Mr. Robins only got away a part of the placenta, the rest being left behind. This was two months ago, and the portion has not yet passed; yet there is no flooding nor symptoms of putrefaction.

Dr. Hall Davis observed that but little could be added to make Dr. Priestley's paper more complete than it was. In the early part of his practice he (Dr. Davis) was in the habit, in cases of retained placenta, of trusting partly to Nature, and this failing, to injections of warm water into the uterus to wash away putrescent matter. Subsequently he became convinced that it is better to remove the placenta manually, and so effectually prevent either flooding or blood-poisoning. Dr. Davis stated that he had also seen cases where the part of the placenta left *in utero* had become changed into a mole, and so produced great distress, with numerous attacks of hæmorrhage. He thought that putrid absorption from retained placenta occurred most frequently where there was hæmorrhage. As to absorption of the placenta, he had never met with a case of it in his own practice, and he thought that the possibility of its happening ought to have no effect upon our treatment of these cases. In proof of the correctness of Dr. Priestley's views, Dr. Hall Davis narrated the particulars of two cases, about which he had been consulted, and in which death resulted from blood-poisoning due to retention of the placenta.

Mr. Peter Marshall said that at one time he was a sceptic as to the absorption of the ovum; but that he had recently seen a case which convinced him that this did sometimes happen. The ovum, in this instance, was felt by two or three experienced practitioners protruding at the os uteri; yet it did not come away, and the patient recovered favourably. Mr. Marshall said he had also noticed that the rigors which occurred in cases of putrid absorption from retained placenta were often of a periodic character. He congratulated the author upon his valuable paper.

Dr. Tyler Smith said that, in rare cases, the placenta was no doubt absorbed after abortion. The chance of such an occurrence ought not to be allowed, as it led to hæmorrhage, and infection of the system by putrid matter. The number of instruments devised to extract the placenta showed how important the matter was in practice; but nothing yet produced was equal to the hand and finger. He had always taught that in abortions occurring even before the formation of the placenta, the thickened decidua should be removed, if it remained and caused excessive draining, after the passage of the embryo. In the early months, the uterus was only partially developed, so that its expulsive action was comparatively feeble, and the difficulty was often increased by adhesion of the decidua and after-birth from disease. In later abortions, he always removed the placenta as soon as its retention produced mischief. It was seldom necessary to pass more than one finger to detach and hook down the retained mass. In some cases, the whole hand required to be passed into the vagina; in others, the uterus was sufficiently low to admit of the passing of the finger without this. Chloroform was often of great value in promoting dilatation of the ostium vaginæ and os uteri, particularly in cases where the retention had lasted several weeks, or even months. He had not seen any mischief follow the removal, but the contrary. The conditions were that the hand should be clean, and the proceeding without violence. He might mention that in cases of flooding after delivery at the full term, when the placenta had been expelled, he had frequently passed the hand into the uterus to remove portions of membrane which were apt to separate from the placenta and remain in the uterus, or hang from the os. Many of the worst cases of flooding met with in practice were, he believed, of this kind, and clearing out the uterus was the only effectual way of stopping the loss of blood.

Dr. Graily Hewitt felt himself called upon to say a few words on the subject before the Society. He believed that the case had been considerably overstated, and that bad effects had been set down as following the retention of the placenta in these cases of abortion, which were really by no means so

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commonly observed in practice as would be supposed from what had been stated. The Author himself had been constrained to admit that there are few recorded cases of serious results. The cases brought before the Society by the Author, as instances of bad results following retention of the placenta after abortion, were some of them open to the serious objection, that they did not prove what they were intended to prove. Thus, a case was cited, in which a patient, who had aborted five years before, and in whose case the placenta had not been removed for some few days afterwards, the uterus was found large, retroflexed, and admitting the sound to the extent of six inches. This case was cited as showing one of the evil effects of retention of the placenta. Where was the evidence that this condition of the uterus was produced by the retention of the placenta for a few days five years before? Other cases related were open, though not so markedly as in this instance, to objections of an analogous kind. He had no objection to the procedure recommended in certain properly selected cases; but he should consider it a most unfortunate thing if this Society gave sanction to the practice of dilating the os uteri, and effecting the removal of the placenta with more or less force in all cases where there was delay of a few hours in its expulsion. He was convinced that the effect of the expression of such an opinion would be most disastrous, and that much injury might be consequently inflicted. It was not easy to convey by pen and ink, and to all persons alike, an adequate idea of the degree of force which might be safely used. How the exercise of force in effecting dilatation of the os uteri in cases of abortion might prove injurious was shown by a case published last year, where the individual (uneducated, it is true) ruptured the uterus and vagina in the attempt to remove the placenta in a case of abortion at the fifth month.

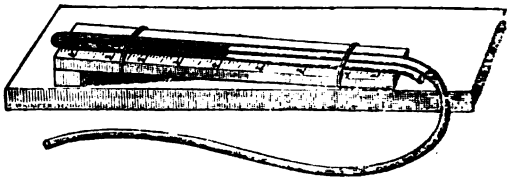
Dr. Tanner remarked that when he first saw the title of Dr. Priestley's paper he thought that most Practitioners must now be agreed upon the treatment to adopt in cases where a portion of the placenta was retained, and therefore that to raise a question upon the subject was unnecessary. The discussion, however, which had just taken place proved that the author had not acted unwisely in bringing the matter forward. With regard to his own views, he (Dr. Tanner) might say that they were quite in accordance with those of Dr. Priestley; and, indeed, he had taken much pains to enforce these same opinions in his recent work on the Diseases of Pregnancy. He believed that, although after abortion a portion of the placenta or membranes *might* be left in the uterus and no ill consequences ensue, yet such a fortunate result was exceptional, and could not be depended upon. There were two great sources of danger in these cases,—namely, flooding and blood-poisoning. If the portion of placenta remained adherent to the uterine walls, it acted like a polypus and produced flooding, which could only be permanently checked by removal of the foreign body. If the substance became detached and was not expelled, it putrefied; and then there was the fear of purulent absorption, uterine phlebitis, and so on. Dr. Tanner then referred to the report of a case by Mr. Humphreys of Shrewsbury, in which the retention of a piece of placenta only the size of a shilling had caused fatal flooding; while he also mentioned a somewhat similar instance about which he had been lately consulted, but where recovery occurred after the expulsion of a mass of after-birth the size of a walnut. He alluded, in conclusion, to the observations of Mr. Marshall as to the absorption of the entire ovum, and stated that he had never yet witnessed anything which would lead him to believe in the possibility of such an occurrence. He thought that it was sometimes very difficult, when a mass was felt at the os uteri, to say whether it was an ovum or a clot of blood; but even allowing the substance in Mr. Marshall's case to have been an ovum, it might have subsequently passed away without the patient's knowledge.

Dr. Priestley, in reply, said that the observations of Mr. Marshall on the periodic character of the rigors in cases of putrid absorption from retained placenta were interesting, inasmuch as they showed that some analogy existed to instances of blood-poisoning from other causes. Dr. Davis's remarks as to the greater proclivity of patients to putrid absorption who suffered from hæmorrhage concurrent with putrid discharge were also deserving of notice. He (Dr. Priestley) confessed his surprise that Dr. Hewitt, who had read the paper to the Society, should have so far misunderstood it as to suppose it recommended the introduction of the hand into the vagina when the placenta was simply lying in the os uteri, and easily removable by other means. The paper was entirely devoted to those embarrassing cases in which the placenta and membranes were entirely included within the uterine cavity, and in which the efforts of the uterus were insufficient for their expulsion. Nothing Dr. Hewitt had advanced had shown that the secundines could be left in the uterus for a prolonged period after abortion without risk to the patient. His objections did not affect the question at issue. Nor could the fears he expressed as to the safety of manual extraction be weighed against the results of practice which had been elicited in the discussion. One of the principal objects of the paper of the evening was to evoke the opinions of men who had large experience on an important point of every-day practice, and he (the Author) had been gratified by finding that the weight of opinion expressed in discussion was decidedly in favour of the proposals he had submitted for the approval of the Society.

NEW INSTRUMENT.

DR. J. BURDON SANDERSON'S DIFFERENTIAL ATMOSPHERIC PRESSURE GAUGE.

This instrument is intended to exhibit and measure very slight differences of atmospheric pressure, as they exist in



different places at the same time. It consists of a water gauge, composed of two parallel tubes of glass, connected at their upper extremity, and lying side by side in the same plane. That plane is fixed at an inclination of one in twenty, and is divided into a scale of inches and tenths. The upper (or bent) part of the instrument is filled with distilled water, so that each column shall stand at 0. One end of the tube is free, the other connected to an india-rubber tube, which may be supplemented by a gas-pipe or other tube, of any desired length, so that it may be carried into the room, or passage, or other place, the difference of pressure of which is to be estimated. When the pressure on each end of the tube is equal, the column in each tube stands at the same level; if the pressure be greater on one than the other, the difference is shown and measured by the difference of height of one column over the other. Thus, if the gauge be placed on a level surface in a room, and the tube be carried through the keyhole, the difference of pressure in the passage outside is shown at once. A rise of one inch corresponds to a column of water one-tenth of an inch high, and to about one-twelfth of that column of mercury. The use of this instrument proves that the barometric pressure of the atmosphere always exceeds that of the inside of a house by a quantity which varies according to the activity of the ventilation.

There are two such gauges in the Surveyor's office at Paddington, each having a tube carried into a sewer below; one looking upwards, the other down the stream. By this means the direction of the atmospheric current can be estimated. The instrument is about to be used by the Ventilation Committee of St. Mary's Hospital, to test the ventilation of various parts of the building, and the operation of the ventilating shaft.

Apothecaries' Hall of Ireland. — The Annual Examination for the prize of five guineas given by the Council for the best answering on a selected Medical subject, and open for competition to all Apothecaries' apprentices, was held in the Board-room of the Hall on Monday and Tuesday, the 6th and 7th inst., when Mr. W. E. Dudley obtained the prize, and Mr. John English was awarded the certificate for distinguished answering.

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MEDICAL NEWS.

UNIVERSITY OF LONDON.—At a meeting on Wednesday it was announced that in 1860 twenty-four candidates passed the examination for the Degree of Bachelor of Medicine. Of these three distinguished themselves in Physiology and Comparative Anatomy, one of whom obtained the University Medical Scholarship and a gold medal, and another a gold medal; six distinguished themselves in Surgery, of whom one obtained the University Medical Scholarship and a gold medal, and another a gold medal; six distinguished themselves in Medicine, of whom one obtained the University Medical Scholarship and a gold medal, and another a gold medal; eight distinguished themselves in Midwifery, of whom one obtained a gold medal; and nine candidates passed the examination for the Degree of Doctor of Medicine. The presentation for degrees then took place. The names of all candidates who had obtained honours in the course of the past year were read; but those gentlemen only who had obtained scholarships, exhibitions, medals, or prizes were presented to the Chancellor.

M.B.		
Bartleet, Thomas Hiron	Queen's, Birm., & King's	Medal in Surgery
Bracey, Charles James	Queen's, Birmingham, & King's	Scholarship and Medal in Surgery
Eaton, John	King's College	Scholarship and Medal in Physiology and Comparative Anatomy
Easton, John	King's College	Medal in Midwifery
Harley, John	King's College	Medal in Phys. and Comparative Anatomy
Harley, John	King's College	Medal in Medicine
Smith, Eustace	University College	Scholarship and Medal in Medicine
B.Sc.		
Brown, Alexander Crum	University of Edinburgh	Scholarship in Chym. and Biology
First M.D. Examination.		
Bayldon, John	University of Edinburgh	Exhibition and Medal in Anatomy & Physiology
Brown, Alexander Crum	University of Edinburgh	Exhibition and Medal in Chymistry
Roberts, Fred. Thos.	University College	Medal in Anatomy and Physiology
Smith, Thos. Starkey	University College	Medal in Materia Medica
Tibbits, Edwd. Thos.	University College	Exhibition and Medal in Chymistry
Watson, Forbes	St. Thomas's Hospital	Exhibition and Medal in Materia Medica
Watson, Forbes	St. Thomas's Hospital	Medal in Botany

UNIVERSITY OF ST. ANDREWS.—List of gentlemen on whom the Degree of Doctor of Medicine was conferred in May 1861 :—

Baller, Joseph H.	L.R.C.P., M.R.C.S. & L.A.C.	Penshurst, Kent
Barratt, Edgar	L.R.C.P. Ed. by Exam. & L.A.C.	Brighton
Belinfante, Simon	M.R.C.S.	Holland
Burrell, Lionel	L.A.C.	Westley, Bury S. Edmds.
Cheetham, Joseph	M.R.C.S. & L.A.C.	London
Coleman, E. W.	M.R.C.S.	London
Connell, Robert	M.R.C.S. Ed.	Glasgow
Cuolahan, Hugh	L.R.C.S. I., M.R.C.S., & L.A.C.	Bermondsey, London
Dobson, Thomas	L.R.C.P. Ed., M.R.C.S., & L.A.C.	Leeds
Dudfield, Thomas O.	M.R.C.S.	Gloucester
Greenwell, Baker	M.R.C.S. & L.A.C.	London
Harland, Henry		Fletching, Sussex
Harrison, Charles	M.R.C.S. & L.A.C.	Lincoln
Hawkes, John	M.R.C.S. & L.A.C.	Maidstone, Kent
Hepworth, Alfred J. L.	M.R.C.S. & L.A.C.	Royal Artillery
Jones, Edward	M.R.C.S.	Dolgelly, N. Wales
Kitching, John	M.R.C.S.	York
M'Conville, John	M.R.C.S. Ed.	Glasgow
Manning, Frederick N.	M.R.C.S. & L.A.C.	York
Marston, Charles H.	M.R.C.S. & L.R.C.P. by exam.	Devizes
Morris, Isaac	M.R.C.S. & L.A.C.	Lewes, Sussex
Muncherjee, B. C.	G.G.M.C., M.R.C.S. Eng. L.M.	Bombay
Neatby, Thomas	M.R.C.S. & L.A.C.	Barnsley, Yorkshire
Park, William	M.R.C.S. & L.A.C.	Ulverston, Lancashire
Pechey, William C.	M.R.C.S. & L.A.C.	Walthamstow, London
Robertson, A. C.	Lic. Fac. Phy. & Surg. Glasg.	Army
Seaborne, C. W. S.	Lic. Fac. Phy. & Surg. Glasg.	London
Seabrook, T. E. F.	M.R.C.S.	London
Smith, David	M.R.C.S.	Glasgow
Soloman, Alexander	M.R.C.S. & L.M.	Calcutta
Spyers, T. C.	M.R.C.S.	Weybridge
Stephens, Joseph	L.R.C.P. E., M.R.C.S. & L.A.C.	Bayswater
Telford, Thomas	L.R.C.S. Ed.	Dublin
Todd, J. M.	M.R.C.S. & L.A.C.	Bognor, Sussex
Wells, Samuel		Madras
Willett, John	L.A.C.	Gt. Budworth, Cheshire
Young, George H.	M.R.C.S.	Mechlin, Belgium

The following gentlemen, having previously obtained the Degree of Doctor of Medicine, were Candidates for Honours, and are placed alphabetically, as follows :—

FIRST CLASS.

Belinfante, Simon, University College
Stephens, Joseph, Bishops-road, Bayswater.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise on May 2nd and 9th :—

Calvert, George, H.M. Army
Cook, John, Buckinghamshire
Galliers, Thomas James, Lady-grove, Herefordshire
Harris, Benjamin, Park-street, Grosvenor-square
Harrison, George, jun.
Houlden, Edward Robert, Crondall, Surrey
Kilburn, John Edward, West Auckland, Durham
Maling, Edwin Allan, Bishopwearmouth.

The under-mentioned gentlemen have passed their First Examination :—

Evans, John Henry, Guy's Hospital
Marshall, Walter Thomas, Birmingham.

APPOINTMENTS.

STRANGE—HEWITT.—W. Strange, Esq., M.D., and F. H. Hewitt, Esq., M.D., were unanimously elected Physicians to the Worcester Dispensary, on Tuesday, the 7th instant.

DEATHS.

ATKINSON.—May 7, at Rhyl, Flintshire, Henry Hope Atkinson, of Tunbridge, Kent, L.S.A., aged 36.

BLETCHLY.—May 10, at Wotton-under-Edge, Gloucestershire, of anasarca from heart disease, Ebenezer Bletchly, aged 54. The deceased had enjoyed an extensive practice for upwards of thirty years, and was much and deservedly respected.

CATLOW.—May 9, Joseph Peel Catlow, of Stretford, Manchester, L.R.C.S. Edin., aged 63.

CLARK.—May 10, Henry Clark, of Berkeley-square, Bristol, F.R.C.S. Eng. (Hon.), M.R.C.S., L.S.A., Consulting Surgeon to the Bristol Royal Infirmary, and Lecturer on Surgery at the Bristol Medical School, aged 59.

FISHER.—May 5, at Warwick, Thomas Fisher, Surgeon, Royal Navy, formerly of the *Revenge*, aged 79.

FITTON.—May 13, at No. 4, Sussex-gardens, Hyde-park, William Henry Fitton, M.D., F.R.S., &c., aged 81.

GRAHAME.—May 8, at No. 9, Cavendish-place, Brighton, William Dixon Grahame, M.D. Edin., M.R.C.S. Eng., formerly Resident Medical Officer at the Westminster Hospital, aged 40.

KNOX.—May 10, at Upper Rutland-street, Dublin, Francis Walter Knox, L.R.C.S. Ireland, Staff-Surgeon, Army, aged 34.

LLOYD.—May 1, William Lloyd, of Tregele, Llanfechell, Anglesey, aged 50.

MACLISE.—May 9, William Maclise, of Beaufort-street, Chelsea, Staff-Surgeon, Army, formerly of the 90th Regiment of Light Infantry, and afterwards of the 22nd Foot, aged 41. He died from the effects of long and trying service in India, at the Cape of Good Hope, and in the Crimea.

MASTERSON.—April 26, suddenly, from the effects of an accidental overdose of laudanum, Dr. Masterson, of Kingstown, Dublin, aged 26.

MCCARTHY.—March 30, at Cairo, Washington McCarthy, M.D., son of Justin McCarthy, late of Cork, Barrister-at-law.

MERRY.—May 1, William Henry Merry, of Broad Clyst, Exeter, M.D. Erlangen, M.R.C.S. Eng., L.S.A., aged 54.

RICHARDSON.—April 6, at Barbadoes, John Gilespie Richardson, Assistant-Surgeon to the 3rd West India Regiment, aged 25.

ROGERS.—May 8, at Tiffield Rectory, Northamptonshire, William Rogers, M.D., R.N., aged 77.

SLADEN.—April, at Madras, Ramsay Sladen, Physician-General, Madras, aged 78.

STEPHEN.—May 13, at The Grove, near Elgin, Morayshire, James Stephen, of Bruceland, M.D., aged 80.

INCOME OF ST. BARTHOLOMEW'S HOSPITAL.—"This noble Charity has its roots deep in the earth, for of its total income not less than four-fifths arise from rentals, the produce of estates lying mostly far away. Deducting from the full amount of rentals the costs of repairs, abatements, etc., the total produce is £27,537 12s. 3d. The next great item is £4625 6s. 6d. dividends on stock, indicating a large reserve in funded property. There is another large sum of £2255 2s. 9d., made up of various receipts from tithes, sale of timber, land, and old materials, and the profits of

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the collegiate establishment, the last being under £90. So that of this income of near £36,000, the whole is the result of true foundation income, except about the one hundred and seventy-fifth part. This fraction is unique in the history of London charities, and it appears under the head of "Benefactions, £184."—*City Press.*

ROYAL COLLEGE OF SURGEONS PRIZES.—The subject of the Collegial Triennial Anatomical Prize of fifty guineas is "The Anatomy and Physiology of the Suprarenal Bodies."—There are two Jacksonian prizes of twenty guineas for this year, viz.: "The Structure and Diseases of the Lacrymal Passages at the Inner Side of the Orbit, being those between the Conjunctiva and the Nasal Cavity;" and "The best Method of effecting the Radical Cure of Inguinal Hernia, explaining the Principle of the Operation adopted." There are also two subjects for the Jacksonian prize for 1862, viz.: "The Relative Value of the Treatment of Popliteal Aneurism by Ligature and by Compression;" and the other on "The Healthy and Morbid Anatomy of the Tonsils, and the Appropriate Treatment of their Diseases."

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At a meeting of the College held on Tuesday, the 7th inst., the following gentlemen were elected to examine candidates for the Fellowship and letters testimonial during the ensuing year:—Richard G. H. Butcher, Jerome Morgan, M. H. Stapleton, B. W. Richardson, Edward A. Stoker, George H. Porter, J. T. Tufnell; and Messrs. Johns, Quinan, and Croly were at the same time chosen to examine candidates for the diploma of Midwifery.—A special meeting of the Council was held at the College on Friday, the 10th inst. at four o'clock, for the purpose of electing a representative on the General Council of Medical Education and Registration of the United Kingdom, in the room of the late Dr. Porter. Dr. William Hargrave having obtained a majority of votes, was declared duly elected.

PHARMACEUTICAL SOCIETY.—An interesting *conversazione* was held on Tuesday evening, in the rooms of this Society. Among the things which attracted most attention were Professor Way's Electric Light, and a series of photographs taken by Mr. Warren De La Rue, representing a total eclipse of the sun, as seen in Spain. The gas furnace by which a quarter of a hundredweight of cast-iron was melted in a crucible by the application of coal-gas, in the space of an hour and twenty minutes, was an object of much interest, as was also the spectrum analysis.

THE TURKISH BATH IN LUNATIC ASYLUMS.—At the meeting of the Cork District Lunatic Asylum last week, a very interesting report was read by Dr. Power, Resident Physician, on the working of the Turkish bath in the Asylum. It was introduced on his recommendation, aided by the inspectors, Drs. Nugent and Hatibel, approved by the governors, and sanctioned by the Privy Council. The experiment has been eminently successful. Since the opening of the bath in January last 124 patients have been submitted to its action. Out of these 10 are discharged cured, while 52 are improved and improving. Sixty remain unchanged, being all cases of many years' standing. Dr. Power says—"I cannot conclude this report without stating, as the result of my limited experience, that such a provision should constitute an appendage to every institution where many persons are congregated for a lengthened period within a confined space. It seems to me to possess a power of compensating in a degree for the absence of pure air and exercise; and it seems to me a Turkish bath should from a part of every union workhouse and Government prison, and all similar establishments."

UNIVERSITY COLLEGE, LONDON.—The distribution of prizes in the Faculty of Medicine took place on Monday. Mr. Grote presided. The report stated that the number of pupils attending the classes was 192; of these 54 were new entries. The conduct of the students during the past session had been exemplary, no breach of discipline having occurred in any class. The College had been deprived of one of its greatest ornaments by the retirement of Dr. Lindley from the chair of Botany, a post which he had held for 33 years with the highest distinction. Two of the Professors of the College had lately received marks of the Royal favour, Dr. Jenner having been appointed one of the Physicians Extraordinary to Her Majesty, in the place of the late lamented Dr. Baly; and Dr. Sharpey having been nominated Crown member of the Council of Medical Education and Registration. The following prizes were then distributed:—General Proficiency.—Longridge prize of 40*l.* August, 1860—William John Smith, of West Heath, Hants. Filliter Exhibition in Pathological Anatomy, 30*l.* Exhibitioner—Henry Charlton Bastian, of Falmouth. Liston Clinical Gold Medal (Surgery)—William Hickman, of London. Surgery, Gold medal—John Hanley Hutchinson, of Catterick, Yorkshire. 1st Silver Medal—Edwin Furse, of South Molton, Devonshire; 2d Silver Medal—William Henry Brotherton, of London; Certificates of Honour—4. Henry Sutcliffe, of Heptonstall, Yorkshire; 5, equal, Thomas Griffiths, of Dryslwyn-fawr, South Wales; David B. Thomas, of Newcastle Emlyn, South Wales; 6. T. Starkey Smith, of Warrington; 7, equal, Thomas Wemyss Bogg, of Louth; William Tyndall Watson, of Tottenham; 8. Albert Southey, of Hampstead; 9. Edmund Venning, of Redruth; 10. Athenedore de Negi, of London. Anatomy.—Senior Class.—Gold Medal—William Henry Griffin, of Banbury, Oxfordshire; 1st Silver Medal, William Saul, of Banbury, Oxfordshire; 2d Silver Medal, William P. Bingley, of Sheffield, Yorkshire. Certificates of Honour.—4, John Foster, of Huntingdon; 5. Edward Charles Bury, of Mitchelstown, Ireland; 6. Alexander Bottle, of Dover. Junior Class.—Silver Medal—Herbert Everitt, of Limpenhoe, Norfolk. Certificates of Honour—2. Charles S. N. Atkinson, of Norwich; 3. Samuel Mills, of Huddersfield; 4. Charles Read, of Falmouth. Anatomy and Physiology.—Gold Medal—Wiliam Henry Griffin; 1st Silver Medal—George Oliver, of Stockton-on-Tees, Durham; 2d Silver Medal—John Harman, of Canterbury; Certificates of Honour—4. William Saul; 5 equal, Palemon Best, of St. Ive's, Cornwall; Alexander Bruce, of London; 6. William. P. Rawlins, of Kentish-town. Chemistry.—Gold Medal—Thomas G. P. Hallett, of Martock, Somersetshire; 1st Silver Medal—G. E. Walker, of Wigan, Lancashire; 2d Silver Medal—Julian A. M. Evans, of Pinner; Certificates of Honour—4 equal, William M. Rogers, of Mauritius; George W. Knox, of London; William P. Colchester, of Forest-hill; Edward F. Teschemacher, of Highbury; 5. William Spooner, of Southampton. Comparative Anatomy.—Gold Medal—Alexander Bruce. Medicine.—Gold Medal—John Hanley Hutchinson; 1st Silver Medal—John Dustan, of Jersey; 2d Silver Medal—Thomas Wemyss Bogg; Certificates of Honour—4. Thomas Griffiths; 5. Edward Thomas Tibbits, of London; 6. T. Starkey Smith. A vote of thanks was unanimously accorded to Mr. Grote for having presided on the occasion.

VITAL STATISTICS OF LONDON.

Week ending Saturday, May 11, 1861.

BIRTHS.

Births of Boys, 972; Girls, 876; Total, 1848.
Average of 10 corresponding weeks, 1851–60, 1655·3.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	633	607	1240
Average of the ten years 1851–60	555·9	536·9	1092·8
Average corrected to increased population..	..	..	1207
Deaths of people above 90	3	2	5
Deaths in 15 General Hospitals	28	33	61

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1851.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	376,427	..	6	6	2	10	1	1
North ..	490,396	1	12	5	4	14	2	2
Central ..	393,256	1	2	1	3	15	4	3
East	485,522	..	6	6	8	24	7	1
South ..	616,685	1	1	7	4	26	4	3
Total.. ..	2,362,286	3	27	25	16	89	18	12

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METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·739 in.
Mean temperature	43·4
Highest point of thermometer	56·2
Lowest point of thermometer	33·4
Mean dew-point temperature	36·8
General direction of wind	N.N.E.
Whole amount of rain in the week	1·13 in.

Medical Times and Gazette.

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NOTES, QUERIES, AND REPLIES.

"He that questioneth much shall learn much."—*Bacon.*

Dr. Munro's reply to Professor Seyd Abdoollah is delayed until next week.

W. B.—We quite agree with the opinions expressed, and regret that we cannot find room for the letter.

Mr. Evans.—We are not aware that any rule has been laid down; but in most cases complainants have produced the Register to prove that irregular Practitioners were not registered.

An Old Meath Hospital Pupil.—The report must be incorrect.

Hope may see that expression has been given to his views respecting the alterations in the Warrant.

Mr. Hughes.—In reply to this gentleman and to several Homœopathic letters received this week, we desire to say, that we take our stand on the "Organon" of Hahnemann. Every Homœopathic doctrine and remedy must be tested by that book. Hahnemann's theory is the result of a subtle, thoroughly coherent chain of argumentation, which could not fail of leading to true results if the premises were true, which they are not. There must be no paltering with this matter, nor yet any attempt to throw overboard such of the great master's dogmas as may be inconvenient to his modern disciples. Whoever wishes to be converted from Homœopathy, let him read Hahnemann's "Organon," as we have done: it is a sort of Medical Euclid, with three or four mistakes in the primary postulates.

Erratum.—Page 384, fourteen lines from bottom of page, *for* A = ½ *read* A = ¼

Viability.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—If a child is born, which neither moves nor breathes or shows no other sign of vitality except "a feeble pulsation at the funis," Vice-Chancellor Stewart has decided that such a child is to be considered to have been born alive. But the law of Scotland "in respect to tenancy declares that a child cannot be born alive unless it has breathed; it therefore requires conclusive evidence of respiration (a)."

The laws of Scotland and the laws of England are therefore diametrically opposed to each other upon this matter.

Will you, or will the members of the Medical Profession through your Journal, have the goodness to state whether the Practitioner in Midwifery should certify in writing that a child was born alive when it neither moved nor respired and showed no sign of life except "a feeble pulsation at the funis."

I am, &c.
4, Savile-row, May 14. Robert Lee.

(a) "Medical Jurisprudence," by A. J. Taylor, M.D. Fourth Edition, page 500.

Disinfectants.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The letter from Dr. Cameron, which appeared in the number of the *Medical Times and Gazette* for May 4, on the subject of the recent outbreak of fever in Liverpool, shows clearly the origin and character of the contagion which caused it. Though not actually suffering from fever themselves, the crew of the *Scheak Gehalid* were in such a pestilential and foul condition as to be capable of communicating to those less inured to filth one of the worst forms of typhus fever. Their uncleanness amounting to a state of infection which was nasally, palpably, and ocularly obvious, it might not be out of place to inquire what, if any, were the means used for disinfecting them. If these wretched Egyptians were not in a condition which called loudly for the employment of some disinfecting agent, then Disinfection must be a mere word, intended only to fill up a few pages in our Dictionaries of Medicine and works on Chemistry applied to the arts, and having no meaning whatever. If some of the recognised disinfectants, such as chlorine (in some form or another) or nascent oxygen, was not used copiously and unstintedly in the case of these men, who, in Dr. Cameron's words, were: "saturated with poisonous miasma, filthy in the extreme, and whose bodies and garments emitted the most offensive effluvia," it would seem to me that all our modern discoveries of disinfectant agents, from Scheele's to Condy's, have been made in vain When are disinfectants to be used if not in cases like this of the *Scheak Gehalid?*

The Government Emigration Board insists on all vessels freighted with emigrants carrying a certain supply of disinfectants, and orders an extra quantity for ships carrying Africans, whatever their state of health. So well known is the value of these agents to the Surgeons employed on the Emigration service, that had any of them had to do with the crew of the Egyptian frigate, their first measure would have been to souse them with the disinfectant provided by the charter party of the Emigration Board, which is now, as I understand, Condy's Fluid. Had this been done, I will venture to say that there would have been less loss of life at the Liverpool Southern Hospital, as well as at the Public Baths, where the sailors were washed without being purified.

In my practice as a Veterinary Surgeon, I have had the opportunity of witnessing the good effects to be obtained in infectious and virulent diseases among horses and other domestic animals, from the judicious use of disinfecting agents, as to feel satisfied that they could not have been adequately employed on the crew of the *Scheak Gehald.*

I am, &c.
High-street, Battersea, May 10. Wm. F. Cross, M.R.C.V.S.

COMMUNICATIONS have been received from:—
Professor Simpson; Professor Helmholtz; Dr. Robert Lee; Dr. Halford; Mr. Crompton; Dr. Anderson; Dr. Spencer Cobbold; Dr. Corfe; Dr. Day; Dr. Usher; Dr. Stone; Dr. Dobell; Dr. Munro; Registrar-General; Dr. Fowler; Mr. Heslop; Mr. Squire; Dr. Hildige; Dr. Duigan, R.N.; Mr. Cox; Dr. Pick; Dr. Evans; Registrar-General, Edinburgh; Dr. R. D. Thomson; Mr. Evans; Dr. Devenish; Mr. Vincent; Mr. Nock; and Mr. Sowerby.

APPOINTMENTS FOR THE WEEK.

May 18. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

Royal Institution, 3 p.m. Max Müller, Esq., "On the Science of Language."

20. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

21. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

Royal Institution, 3 p.m. Mr. John Hullah "On the History of Modern Music."

Pathological Society, 8 p.m. Meeting.

22. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

Hunterian Society, 8 p.m. Mr. Durham "On Modern Syphilology."

23. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.

Royal Institution, 3 p.m. Mr. Pengelly "On the Devonian Age of the World."

24. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

Royal Institution, 3 p.m. Professor J. O. Westwood "On the Metamorphosis of Insects."

EXPECTED OPERATIONS.

King's College Hospital.—The following Operations will be performed this day (Saturday) at 2 o'clock:—

By Mr. Fergusson—Removal of Epithelial Growth from Penis; Removal of Melanotic Tumour from Arm.

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PULVIS JACOBI *VER.*, NEWBERY'S.

To the Medical Profeſſion of Great Britain and Ireland.

GENTLEMEN,—We beg to call your attention to the following extracts from a Paper by the late John Cheyne, M.D., F.R.S.E., M.R.I.A., Phyſician to the Hardwicke Fever Hoſpital, Dublin, and Phyſician-General to His late Majeſty's Forces in Ireland, &c. &c., contained in the "*Dublin Hoſpital Reports*," *vol.* 1, *p.* 317.

"Since this caſe came into my poſſeſſion, I have been led to "make a good many clinical experiments, which have enabled me "to verify the reports which I had heard of the efficacy of JAMES'S "POWDER, in ſometimes removing the APOPLECTIC DIATHESIS in "perſons advanced in life. It is, moreover, worthy of obſervation, "that JAMES'S POWDER has been of remarkable utility in "certain inſtances of DETERMINATION OF BLOOD TO THE HEAD, which "occurred at an early period of life, and threatened to end by "effuſion. Laſtly, in two caſes of GENERAL PLETHORA, in which, "however, the head was more affected than any other part, "JAMES'S POWDER was exhibited by me with perfect ſucceſs."

Alſo *vol.* 1, *p.* 320.

"The following very ſimple method of exhibiting JAMES'S "POWDER, in caſes of undue determination of blood to the "head, is that which I have generally purſued. The patient is "made to begin with a very moderate doſe, not more than two "grains at bedtime, and to increaſe the doſe by half-a-grain every "night, until ſome ſenſible effect is produced upon the ſtomach, "bowels, or ſkin. Should the ſtomach be affected with ſickneſs, "the doſe muſt be leſſened by one grain on the following night. "By the addition of a little rhubarb to it, a larger quantity of "JAMES'S POWDER may be adminiſtered than the ſtomach could "otherwiſe bear. If the ſkin is ſoftened, or the bowels affected, "the doſe ſhould not further be increaſed, but it muſt be repeated "every night for a conſiderable length of time: in ſeveral inſtances "I have known eighteen or twenty grains taken for a conſiderable "period without any inconvenience."

The following extract (ſhowing the increaſing eſtimation in which the true Dr. James's Powder is held by Medical Practitioners) is taken from "The Lumlæan Lectures," 1858-59, delivered before the Royal College of Phyſicians, by A. Tweedie, M.D., Phyſician to the London Fever Hoſpital, who is admittedly one of the higheſt practical authorities on the ſubject of Fever. He ſays, ("*The Lancet*," *June* 16, 1860, p. 590,) as follows:—

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ORIGINAL LECTURES.

LECTURES ON THE SPINAL CORD,

DELIVERED AT

The College of France,

DURING THE SUMMER SESSION 1860,

By M. CLAUDE BERNARD,

Member of the French Institute; Professor of General Physiology at the Faculty of Sciences, &c.

LECTURE XIV.

ON THE FUNCTIONS OF THE SYMPATHETIC NERVE.

Summary: Experiments upon the Functions of the Sympathetic Nerve—Simultaneous Augmentation of Warmth and Sensibility in the Parts connected with a Divided Branch of this Nerve—Flow of Blood to the Part—When Galvanism is applied to the Peripheral Extremity of the Divided Nerve the Effects are reversed—These Disorders evidently connected with the Vascular System through the Involuntary Muscular Apparatus—The Spinal Cord is, therefore, entrusted with the Control of this Part of the Economy—Application of these Views to certain Pathological Phenomena—Diabetes and Albuminuria produced in Sound Animals by Wounding a given Point of the Fourth Ventricle—These Effects explained by the Acceleration of the Abdominal Circulation—M. Kühne's Experiments on Batracians—Operations on the Sympathetic Nerve do not considerably increase the Temperature of the Inward Regions of the Body—In what manner Grape-Sugar makes its appearance in the Urinary Discharge, when the Fourth Ventricle has been wounded—Effects of this Operation at present left, in a certain degree, to chance—The Branches of the Sympathetic Nerve which spread from the Brain to the chief Abdominal Viscera hitherto unknown—Salivation excited by Operations on the Origin of the Seventh Pair—Hypothesis which ascribes these Various Phenomena not to an Excitation but to a real Paralysis of the Corresponding Nerves—Reasons for opposing this Opinion—Active Dilatation of the Vessels.

GENTLEMEN,—In our last Lecture we had undertaken to prove, by direct experiments performed in your presence, the existence of the chief properties attributed to the sympathetic nerve. For this purpose we divided, this morning, its left cervical branch in the rabbit now placed upon the table. The left pupil, as you will observe, is strongly contracted, while, on the opposite side, it retains its ordinary dimensions. At the same time, a considerable vascular development, attended with an increase of both temperature and sensibility, has taken place in the corresponding ear. When the animal has been trepanned, previously to the operation, the same changes are found to occur in the brain, which grows warmer on the injured side, the pia-mater being also considerably vascularised. Without opening the skull, this internal difference of temperature may easily be ascertained by introducing a small thermometer into the animal's nostrils.

[M. Bernard here pinches alternately the animal's ears: on the right side it evinces but little sensibility, while on the left, its sensitiveness is evidently exaggerated. A delicate thermometer being then plunged into the nostrils, a considerable difference of temperature is found to exist.]

The operation which this animal has just undergone is the division of the cervico-cephalic branch of the sympathetic nerve; but the effects produced in this manner will be entirely reversed if we galvanise its peripheral extremity. The left ear is at present endowed with greater sensibility and a higher temperature than the right one; if submitted to the process of freezing it would exhibit a greater power of resistance; and lastly, if a wound of equal dimensions were to be inflicted on both ears a much greater quantity of blood would flow from the left than from the right one. But the application of galvanism to the divided nerve gives rise to a totally different state of things. It reduces the temperature of the corresponding parts to its usual level, and even depresses it to a lower degree. Supposing the power of the current to be carried sufficiently far, the whole process of circulation would be suspended for the time being, as the microscopical examination of the capillary vessels would show. It is therefore evident that the disturbances arising from the various operations performed on this nerve are occasioned by successive contractions and dilatations in the vessels, and that the excessive heat, the abundant secretions and morbid sensibility which follow the division of its cervical branch, are the result of certain definite variations in the capacity of the vascular apparatus, which lie entirely under the control of this part of the nervous system.

We now possess the key of the pathological symptoms which are created by certain definite Surgical lesions of the spinal cord. When, for instance, a given portion of the anterior surface of the fourth ventricle is wounded, a sudden acceleration of the abdominal circulation is produced, and the vessels in this region grow turgid. All the corresponding secretions are accelerated, and the urine flows with more than usual abundance. Sometimes this latter symptom is attended with albuminuria, sometimes with diabetes mellitus. This is the case when the circulation of the liver has also been accelerated; and, through similar operations, all the varieties of these two singular affections may be engendered in sound animals. You are aware, for example, that an extraordinary abundance of the urinary discharge, and a notable diminution of the quantity of certain principles which it usually contains, are generally observed in diabetic patients; but there exist some cases in which the quantity of this liquid which passes in the twenty-four hours is not greater than in the normal state. At the same time, it contains the usual proportion of uric acid. The physiologist has it in his power to create both varieties of this disease. Nor is it in mammalia alone that the fact has been ascertained. Our experiments on this subject have been repeated in frogs by M. Kühne; and this gentleman succeeded in producing diabetes in these animals by a similar operation. We meet here with an interesting illustration of a fact to which your attention has often been called; namely, that the phenomena observed under given circumstances in any one tribe of animals are met with, under the same conditions, in all the other divisions of the scale of being.

The important modifications which we have just been describing, will be readily ascertained by the usual means, when the external parts of the body are under observation: in fact, their temperature, especially in cold weather, is always inferior to that of the internal organs. In winter, the variations obtained in these experiments frequently extend to 15° or 20° Centig. (from 27° to 36° Fahr.) In summer, of course, we do not meet with so considerable a difference. But when the great visceral cavities are examined, the case is no longer the same: the temperature of the internal parts of the body being almost invariable, cannot be expected to rise above its ordinary level, when the sympathetic nerve has been divided: for there exist, in this respect, certain limits which cannot be outstepped; the difference therefore never exceeds one or two degrees, under the most favourable condition. It has, for instance, been ascertained that during the digestive process the internal temperature of the body is a little higher than in a state of abstinence: and that after dividing the abdominal branches of the sympathetic nerve, it remains the same in both cases, but never rises above the degree which it previously attained during digestion.

We meet with similar phenomena in animals, in which diabetes has been created by a wound inflicted on the fourth ventricle; the temperature of the kidneys, the activity of their functions, and that of the local circulation simultaneously experience a powerful impulse: a fact which explains the extraordinary abundance of the urinary discharge, but does not account for the presence of grape-sugar in this liquid. But the liver is known to produce an amylaceous substance which is ultimately converted into sugar, and afterwards destroyed in other parts of the system: now the abdominal circulation (and consequently that of the liver) being notably accelerated after the operation performed on the fourth ventricle, a larger amount of sugar is produced, than the system is able to dispose of in a given space of time; and the surplus finds its way out of the economy in the excretions of the renal glands, just as if it had been directly thrown by an injection into the veins.

The division of the nerves belonging to the system of organic life always gives rise, as you perceive, gentlemen, to three great classes of morbid phenomena: 1st. An acceleration of the passage of the blood through the vessels; 2nd. An increase of temperature; 3rd. An exaggerated activity of the secretions:—and all these disorders are referrible to a perturbation produced in the involuntary muscular apparatus.

With respect to the various results obtained by inflicting

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wounds on the fourth ventricle—an operation which sometimes produces albuminuria, sometimes diabetes, and not unfrequently both disorders at once—they teach us that the vascular functions of different organs are not regulated by one and the same veins, but that a special branch of the organic system belongs to each important apparatus of the economy: this point will no doubt be elucidated at a future period by the labours of anatomists, and we shall then, no doubt, be able to control with the greatest accuracy these various effects which are now left to chance; it would for this purpose be necessary to act, not upon the medulla oblongata itself, but upon those branches of the sympathetic nerve which extend from the brain to the chief abdominal viscera; our own experiments have, at least, enabled us to ascertain that neither the tenth pair, nor the cervical branch of the sympathetic nerve are devoted to this purpose; for both of these may be divided, without affecting the kidneys in the slightest degree; and after this operation, an incision into the same part of the brain as before, creates, in these organs, the same disorder as usual. It would therefore appear that the corresponding branch is deeply seated: it probably descends through the osteo-fibrous sheath which encases the vertebral artery, or arises from a much lower point of the spinal cord.

A similar explanation will, we believe, be found applicable to the perturbations which arise in the salivary secretion, when that region of the brain from which the facial nerve emerges, becomes the seat of a surgical injury. In endeavouring to divide this nerve at the very root, we unintentionally provoked an abundant salivation in the subjects which underwent the experiment. We formerly attributed this result, as well as the increased activity of the renal and hepatic secretions after certain operations on the fourth ventricle, to an excitation of the motor nerves which spread to these glands; but our experiments on the nerves of organic life suggest a totally different view of the case.

On inflicting a wound on the spinal cord, in the upper part of the dorsal region, or merely dividing the sympathetic nerve itself, in this point, we meet with a sudden exaggeration of vascular phenomena, coinciding with an extraordinary activity of the secretion; and, in animals which perspire freely (the horse, for instance), the corresponding parts are bathed in sweat. If, in the dog, the cat, and certain other species, this latter effect is not observed, the fact is accounted for by the peculiar nature of the skin in these animals, which in the natural state never perspire at all.

In these experiments we are at liberty to suppose that the nervous system is not excited, but paralyzed, the effects produced being strictly similar to those which follow the division of the sympathetic nerve; and if this hypothesis were adopted, we might extend it to the disordered action of the kidneys and salivary glands, in consequence of injuries residing in certain definite regions of the brain. It must, however, be acknowledged, that there exist strong reasons for not supposing this to be the case, for the disorder ought to last as long as the divided fibres do not unite again; while the morbid symptoms usually disappear two or three days after the operation, long before cicatrization can be expected to have taken place. It it besides highly probable that, in all such cases, the vascular system is not the seat of a mere passive distension, but of an active dilatation, as we shall endeavour to prove in our next Lecture.

In short, Gentlemen, the physical, chemical, and pathological phenomena which have just been discussed, are evidently connected with certain disturbances in the powers of secretion enjoyed by the nervous system; but the real nature of these changes is still deeply involved in doubt.

LONDON FEVER HOSPITAL.—Dr. George Buchanan, B.A. and M.D. London, and Dr. W. H. Broadbent, M.D. London, have been elected to fill the vacant Assistant-Physicianships at this Hospital. Dr. Buchanan, who is an ex-Medical and Surgical Scholar, and Gold Medallist of the London University, and was formerly a Resident Medical Officer of the Fever Hospital, holds the appointments of Physician to the Western General Dispensary, Assistant-Physician to the Hospital for Sick Children, and Medical Officer of Health to St. Giles' and St. George's, Bloomsbury. Dr. Broadbent is also a Medical Scholar and Medallist of the London University, and holds the appointment of Medical Registrar at St. Mary's Hospital.

ORIGINAL COMMUNICATIONS.

TWO CASES OF WRY-NECK TREATED SUCCESSFULLY BY ELECTRICITY.

By J. ALTHAUS, M.D., M.R.C.P.

ON the 21st of November, 1859, I was consulted by a lady, aged 34, unmarried, who had for about eighteen months suffered from spasmodic contractions of the left trapezius and cleido-mastoid muscles. She observed the first symptoms after a violent emotion caused by witnessing an accident in the street. At first the contractions were slight, and only occurred when the patient was excited, when in society, or if suddenly spoken to. The affection gradually became stronger and more troublesome. In eating, when the spoon or fork was carried to the mouth, the head would always turn away. At the same time, a feeling of numbness, stiffness, and fatigue was observed in the left side of the neck; but there was no pain, unless the contractions were unusually violent. She was treated at first by blisters to the neck and purgatives, but did not experience any benefit from them. At a later period of her illness she consulted Dr. Todd, who prescribed the valerianate of zinc in two-grain doses twice a-day, and she thought she had observed a slight improvement after it; but as, after having taken it regularly for two months, she was still a severe sufferer from her complaint, by the advice of Dr. Todd she came to me to try a galvanic treatment.

On making an examination of the muscles of the neck, I found the left trapezius and cleido-mastoid strongly developed and somewhat rigid, especially the latter. The corresponding muscles on the right side did not show any signs of atrophy, but on applying the Faradic current to the two sets, the excitability of the fibres was greater on the left than on the right side, and the sensation excited by the application of the current was also more considerable on the left side. While I was examining the muscles, violent spasms occurred in the affected ones. The head was convulsively thrown towards the left side, and all the patient's endeavours to keep it straight were of no avail. I then immediately applied a strong current to the antagonistic muscles, and thereby succeeded in restoring the equilibrium between the two sets and in calming the spasmodic state of the left trapezius and cleido-mastoid. I afterwards practised Faradisation of the skin, which I had formerly found to be of great benefit in hysterical convulsions.

The influence of emotion in exciting the trembling and spasms of the muscles was most striking in this case. The patient said that she suffered far less when she was alone and if the room was darkened; but if she thought herself observed and the object of wonder or pity she became much worse. She had, therefore, almost retired from society, and was only with difficulty induced to leave her rooms, from which she used to shut out the light. As eating was troublesome, she took as little food as possible, and in consequence of this, and the melancholic turn of mind caused by her affection, her general health had become impaired and the catamenia were less abundant than they had formerly been.

The application of electricity was now continued, as above, for three days, when the catamenia appeared before the time and unusually abundant, so that the treatment had to be discontinued for a week. After that it was re-commenced, and in a month's time the equilibrium between the two sets of muscles was so entirely re-established that not a trace of the affection was observed, even when the patient was excited in any way. The general health also improved in consequence of the changed mode of life now adopted by the patient, and the courses again became normal.

On the 4th of May I was consulted by a brewer from Hampshire, aged 40, a strong, healthy man, who, with the exception of what he described as "bilious head-ache," from which he now and then suffered, had never been ill before the present affection came on. Three months ago he first noticed that his head was inclined to fall towards the left side. He was unable to assign any exact cause, but mentioned that shortly before he first felt ill, when driving, his horse fell and broke his neck, which gave him a great shock. He had also had much anxiety lately, and admitted having slept on a damp couch shortly before being attacked by the spasms.

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The latter affected the left side of the neck, and gradually became so much worse that he was constantly obliged to hold his head in the right position with the left hand, so that the latter became in a measure useless. He was no longer able to dress himself. His food was obliged to be cut for him, as he could not hold the knife and fork. He was also troubled at night, for if he attempted to sleep on the side, as he was accustomed to do, his head would begin to tremble, so that he was obliged to lie straight on his back. He could then sleep well, and generally felt better in the morning than at other times of the day. The treatment at home consisted of laudanum, calomel, blisters, leeches, and cupping, but it had no beneficial effect whatever. He then came up to town to consult Dr. Lichtenberg, who prescribed a veratrine ointment to be applied to the nape of the neck, and sent him to me, that he might have electricity applied to the suffering part.

On examining the neck, the left trapezius and cleido-mastoid were found more strongly developed than the corresponding muscles of the right side, which were soft and flabby. On applying the Faradic current to them, I noticed the same phenomena as in the case first described, although in a more considerable degree. This case was altogether more one of purely muscular disease than one of an emotional kind, which was also evidenced by the circumstance that this patient was continually troubled while the subject of the first case only suffered at intervals. I therefore had recourse chiefly to Faradisation of the suffering muscles, while Faradisation of the skin, although I did not entirely neglect it, did not form an important feature of the treatment.

Immediately after the first application, which lasted for ten minutes, the patient felt easier, and could hold his head straight for a short time without being obliged to support it with the hand. The improvement was now so rapid that after a few other applications of electricity in the way described the patient was no longer obliged to hold his head with the left hand, so that he could feed and dress himself again without aid. He also could again sleep on the side without being disturbed by trembling of the head. I was, therefore, hopeful of a perfect cure; but the patient, anxious about his business, felt so unhappy in London that he left town before he was quite cured, after having stayed here less than a week.

The two cases just described, to which others might be added, justify the conclusion that in spasmodic wry-neck electricity is a most valuable remedy, especially when applied in an early stage of the affection. As to the mode of applying it, I will only add that in cases in which the emotional nature of the complaint is strikingly apparent, Faradisation of the skin, which produces a powerful impression upon the nervous system, is preferable. If the influence of emotion is less marked, and the affected muscles are only slightly rigid, while the nutrition of the corresponding muscles of the other side of the neck is impaired, Faradisation of the latter ought to be performed, in order to restore the lost equilibrium. Finally, if there should be a marked rigidity of the spasmodic muscles, and the corresponding ones should seem normal, a continuous current of about twenty pairs of Daniell's or Bunsen's battery ought to be applied to the rigid muscles.

18, Bryanston-street, Portman-square.

THREE CASES OF OVARIOTOMY.

By T. SPENCER WELLS, F.R.C.S.,

Lecturer on Surgery at the Grosvenor Place School, Surgeon to the Samaritan Hospital, etc.

In accordance with the rule I have hitherto acted upon to publish every case in which I perform ovariotomy, the following three cases are submitted to the Profession. My twentieth case may be found in the *Medical Times and Gazette* of February 9, 1861, page 145. The patient has remained quite well.

Case 21.—On the 25th of last January I was introduced, by Dr. Grimsdale, of Liverpool, to a single lady, 22 years of age, the subject of a large multilocular ovarian cyst, of at least four years' growth. Dr. Grimsdale tapped for the first time and injected iodine in January, 1858. She recovered fairly after this and remained for about 18 months without perceptible increase in size. Then she began to fill rapidly, and when I saw her the abdominal distension was equal to that of pregnancy at the full period. Looking to the fact that a solid mass had been felt at the time of the first tapping after some fifteen pints of fluid had been removed from the principal cyst, and to the physical evidence that a considerable portion of the existing growth was semi-solid, it was clear that nothing but ovariotomy offered a chance of cure, and it was agreed, in consultation with Dr. Grimsdale, to perform the operation as soon as urgent symptoms called for relief.

I performed the operation at Liverpool on the 9th of March. Mr. Hakes administered chloroform, and I was most kindly and ably assisted by Dr. Grimsdale and Mr. Bickersteth, of Liverpool, and by Dr. Gordon, of Dublin. The tumour was non-adherent, except to a small piece of omentum which was easily detached, and I was able to remove it through an incision only just large enough to admit my hand. A broad peduncle was temporarily fixed by the clamp, and the wound closed by deep sutures transfixing the peritoneal edges, and by superficial sutures. The peduncle was then transfixed and tied in four portions below the clamp which was at once removed, and the stump fixed to the lower angle of the wound by a harelip pin.

The cyst and contents weighed about sixteen pounds. The principal cyst had its inner coat covered by layers of lymph of different dates. The rest of the growth consisted of the ordinary compound cysts with gelatinous contents, except a lump about the size of the fist, close to the peduncle. This was the thickened and corrugated wall of a cyst (? that injected by iodine). On microscopic examination it showed nothing but the elements of fibrous tissue.

I left Liverpool the day after the operation, the patient remaining under the care of Dr. Grimsdale, to whom I am deeply indebted for the intelligent care with which he carried on the after treatment.

The progress of the case, as I heard from him, was most satisfactory for more than a fortnight. An occasional small opiate enema constituted the whole of the Medical treatment. The ligatures on the peduncle did not separate until the nineteenth day, the longest time I have known, though much shorter than in many recorded cases.

Three weeks after operation the wound, which some days before began to look unhealthy at the lower part, though apparently well united at the upper part, began to slough, and there was a rigor, with rapid pulse and some abdominal pain. The condition of the wound became worse, and the upper portion re-opened and was covered with a firmly adherent slough. The tongue was black and the pulse very rapid. Mr. Bickersteth saw the patient in consultation with Dr. Grimsdale and they applied strong nitric acid to the wound and soon afterwards got her some miles inland from Liverpool. Dr. Grimsdale writes, "Mr. Bickersteth tells me he has had similar trouble with many wounds of late, both in public and private practice."

The patient rapidly improved after removal, the catamenia appeared, and Dr. Grimsdale wrote to me on May 9, saying, "Miss —— is well."

Case 22.—On March 16, I saw a lady, 55 years of age, in consultation with Dr. Bainbridge of Suffolk-place. She was suffering from the presence of an ovarian tumour in which there was so clearly no large cyst, that we decided at once it would be quite useless to tap, and that ovariotomy was the only resource. This patient had had one child, now 30 years old; no other child and no miscarriages. The catamenia had always been regular until seven years ago, when they ceased naturally, and she remained well for the next two years. About four or five years ago she became subject to sick-headache, cough, and back-ache, and began to "get stout;" but did not think much of it until last August, when she became so large that she consulted Dr. Bainbridge, who at once recognised the nature of the disease. The risk of ovariotomy having been fairly put before her, she took time to consider; but great dyspnœa coming on, with signs of congestion of the left lung, and considerable bronchial irritation, the operation was decided on as a last resource. Accordingly, I operated on April 15. Mr. Cooke, of Charlwood-street, administered chloroform, and Dr. Bainbridge and Dr. Rogers gave me their valuable assistance. There were a few slight parietal adhesions, and it was necessary to separate a very large piece of omentum from the upper part of the tumour. The rest of the opera-

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tion was completed precisely as in the case just related. The separated portion of omentum appeared so much altered by long adhesion and the process of separation, that I cut away all that did not appear healthy, and tied two arteries, which bled freely. These ligatures were brought out at the upper angle of the wound, and those on the peduncle at the lower.

I need not describe this tumour, as it has been referred to a Committee of the Pathological Society, and their Report will appear in the Proceedings of the Society.

Recovery after operation was uninterrupted, except by the bronchial irritation, which, however, gradually subsided. The deep sutures were removed on the fourth day. The ligature on the pedicle came away on the eleventh day—one omental ligature on the thirteenth, and the other on the fifteenth day. I paid my last visit on May 10. The lady was then quite convalescent, the wound soundly healed, and she left town on the 14th for change of air.

This was the sixth successful case in my practice since the last which had terminated unsuccessfully. The following proved less fortunate.

Case 24.—A married woman, 42 years of age, was sent to me by Dr. Burton, of Brompton, in Kent, and was admitted to the Samaritan Hospital on the 9th of April last. She had been married nineteen years, and had had four children. The youngest is 2 years and 3 months old. She first noticed enlargement of the abdomen in April, 1860, and attributed it to pregnancy, engaging Dr. Burton to attend her early in November. About the month of November Dr. Burton found that the catamenia had appeared regularly for the preceding fifteen or sixteen months, and on examination he detected at once the nature of the disease. He tapped her in December, and removed seventeen pints of ovarian fluid. He tapped a second time in February, removing sixteen pints, and again on the 1st of April (eight days before her admission to the Hospital) removing then fourteen pints, but with very slight diminution in the size of the abdomen. On admission she appeared cheerful, but was much emaciated, and suffering a good deal from the effects of the distension on the viscera of the chest and abdomen. But little relief could be gained by a repetition of tapping; iodine injection was out of the question; and ovariotomy the only possible means of avoiding death which could not be very far distant. There were evidences of extensive parietal adhesions, and the case was looked upon in consultation as an unfavourable one; but others equally unfavourable had recovered, and it was determined to comply with the patient's desire to be relieved, at any risk, of her burden. I performed the operation on the 16th of April. Dr. Althaus administered chloroform. Dr. Burton, Dr. Hamilton Roe, Dr. Symes Thompson, and several other gentlemen were present. The parietal adhesions were both firm and extensive, but I succeeded in breaking them all down, and in removing the entire growth through a small incision. The peduncle and wound were treated precisely as in the cases just related. The tumour was a very large compound cyst, the cyst walls being much more highly vascular than usual. She rallied well after the operation, had very little pain, so that only two opiate enemas were administered. She passed a tolerable night, but became low and sick towards morning. Champagne, brandy, and soda-water, wine and arrowroot, etc., were given freely, and she sucked ice with pleasure. Hot poultices were kept on the abdomen, but the pulse became very feeble and rapid towards the afternoon, and she sank quietly twenty-four hours after operation.

On examination of the body twenty-four hours after death the heart and lungs were found to be healthy. The peritoneal cavity contained from four to five pints of reddish serum, but no blood clot. There was a slight inflammatory blush over a few coils of small intestine, but no lymph, nor adhesions. The peritoneal aspect of the wound was united, but not so closely as I have seen when the peritoneum had been less altered by adhesions around the site of the incision. The uterus and left ovary were healthy. There was a little clot (probably about an ounce), the remains of extravasated blood, on the loose cellular tissue around the left round ligament. The serum found in the peritoneal cavity must have been a very active animal poison, for I suffered severely two days after the examination from a very slight scratch with the point of a needle on the left forefinger. I sucked the spot instantly, but the next day a small vesicle formed, and I applied caustic freely. On the second day I had severe rigors, lasting several hours, with intense headache, relieved by vomiting and a copious perspiration, which lasted about eighteen hours. For several days afterwards I was very weak, but all the severe symptoms had passed off by the fifth day after the puncture.

This recalls a question I have raised before. The peritoneum contained some pints of poisonous serum. It was probably formed by part of the membrane, and might be absorbed by other parts. If so, a poison which affected me so severely in a small dose might easily kill anyone in a larger dose. I recovered after the absorption of a fraction of a drop; but the poor woman was overpowered by the quantity taken up by her own absorbents. I am quite aware of the objection some may offer, that a fluid poisonous after death might not have been a poison during the life of the woman; the reply is, that twenty-four hours was too short a period after death for decomposition to have occurred; and also, that all experience has proved inoculation of the fluids of those dying of puerperal peritonitis, erysipelas, etc., to be far more dangerous when the bodies have been fresh, than when putrefaction has commenced. This is not a mere question of theory or curiosity, for it leads to an important rule in practice—or, rather, to the suggestion, that, in cases where such poisonous serum may reasonably be supposed to be present, and *à fortiori* when there are physical signs of its presence, that a part of the wound should be opened to allow of the free escape of the serum by the side of the peduncle. In two cases I formerly published I acted upon this rule with the greatest advantage, and both patients recovered. The question also arises, whether one is not apt to unite the wound too closely round the peduncle. The fear is that peritonitis may be set up by leaving *any* opening; and one generally closes the wound carefully around the peduncle, partly to prevent entrance of air, and partly to prevent gravitation into the abdomen of the putrid fluid formed around the stump during the time the ligature is in process of separation. This plan may be a good one on the *whole*; *but* I am disposed to think that in many cases where there is such a condition as I have described after operation, a free opening should be made for the escape of the serum.

Another question, of even greater importance, is suggested by this case—Is it right to perform such an operation as ovariotomy in unfavourable cases? It may be said that by doing so the Surgeon not only risks his own reputation, but lowers the operation he performs in the estimation of the Profession, and thus lessens the number of favourable cases who might be willing to undergo it, were it not known that one in two, three, or four who do submit to it, die. It is quite clear that a Surgeon who will only operate on very favourable cases ought to show far better returns than one who consents to stake his own reputation in order to give a dying patient a small chance of recovery; and it may possibly be right to follow the more prudent course. But in a case where a poor woman says, as many have said to me, "I suffer from a disease which must kill me. I cannot live very long. My life must be a life of suffering. If you operate, I know the risk I run; but I *may* be cured and return to my husband and children, and I would rather die than live as I am,"—in such a case as this, I do not envy the feelings of a man who—unless he saw the case was absolutely hopeless—would let any consideration for the general character of Surgery, or for his own reputation as a successful operator, induce him to refuse the prayer of the poor dying creature who placed her life in his hands.

Still, I think it is right that some classification of cases should be adopted, for what we want in practice is not an answer to the question "What is the general success of ovariotomy?". What the patient and the Surgeon want to know is, "What are the probabilities of success or failure in this particular case?" and this knowledge can only be gained by testing the operation in various classes of cases—distinguishing those patients who are young and healthy from those who are old, or worn out by frequent tappings or long-continued disease, and so on. If I were to exclude the fatal cases in my own practice which were regarded by myself and others in consultation as unfavourable before operation, I might say that I had scarcely lost a single case; and my experience of those cases which may be regarded as favourable is bringing me to the conclusion that ovariotomy is one of the most successful of our capital operations, and not very much more dangerous than a simple tapping.

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Taking favourable and unfavourable cases together, the following is the general result of my experience of the operation in Hospital and private practice:—

	Cases.	Deaths.	Recoveries.
Hospital	14 ..	5 ..	9
Private	10 ..	3 ..	7
	24	8	16

I need hardly say that amputation of the thigh, ligature of the larger arteries, lithotomy in the adult, and other capital operations called "legitimate," show a general result less favourable than this operation, which is still stigmatised by some writers as "unjustifiable."

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

CONDUCTED BY

JONATHAN HUTCHINSON,

Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital,

AND BY

J. HUGHLINGS JACKSON, M.D.

STATISTICAL REPORT OF OPERATIONS PERFORMED DURING THE YEAR 1860.

The subjoined Report comprises the cases supplied by the following Provincial Hospitals:—

The Derby, Leeds, Leicester, Sussex County, Addenbrooke's (Cambridge), Nottingham, Chester, Cheltenham, West Norfolk and Lynn, Sheffield, Hull, York, Northampton, Cumberland, and Gloucester.

AMPUTATIONS AT THE SHOULDER-JOINT.

Case 1.—The Nottingham: Mr. Thompson.—A man, aged 34. Compound fracture of the head of the humerus, the glenoid cavity, and complete destruction of the elbow-joint. Amputation anterior and posterior flap. Recovery. *Case* 2.—The Liverpool Royal Infirmary: Mr. Long.—A lad, aged 16. Compound comminuted fracture of the arm. Amputation. Recovery. *Case* 3.—The Cumberland Infirmary: Mr. Page.—A lad, aged 15. Extensive ulceration of the arm, and disease of the humerus. Amputation. Recovery. *Case* 4.—Addenbrooke's Hospital (Cambridge): Dr. Humphry.—A man, aged 41, admitted with a painful stump. He had had pain in the stump ever since the previous operation. A variety of measures had been tried to relieve it without benefit. Amputation at shoulder-joint. Recovery.

Fatal Cases.

Case 4.—Amputation at the shoulder-joint on account of mortification of the arm, commencing after a severe injury (fractured humerus, laceration of soft parts and of the brachial artery). He bore the operation very well, but sank on the evening of the following day. *Case* 5.—A lad, aged 14, was admitted in consequence of having met with a severe injury from machinery. The whole of the right arm, from the wrist to near the shoulder, was severely lacerated, all the muscles being torn and contused, and the vessels and tendons exposed. There was no pulse at the wrist; but the vessels were afterwards found uninjured. There was a fracture of the radius near the wrist, and of the left femur in the middle third. Amputation at shoulder-joint. Many ligatures were required. The thigh was put up with a Liston's splint. January 26.—Is restless, and gets no sleep, although he has an opiate at night. Pulse 100, rather sharp; countenance looks exsanguined. Ordered wine. 27th.—Is delirious at night, and a little in the day also. Ordered ammonia and laudanum in a mixture, to be taken every three hours. 30th.—Is no better; stump swollen, and discharging a copious sanies; delirium continues, though to a rather less degree. Pulse 120, very feeble. Takes a pint of wine daily. February 3.—Pulse still 120, thrilling. Stump discharging pus copiously; several of the sutures have ulcerated through; the main vessel pulsates strongly on the surface of the stump. Has some cough and sickness. Ordered effervescing saline mixture, containing hydrocyanic acid and morphia, every two hours. 12th.—More or less delirium is constantly present. The main ligature, and all the others but one have come away; no hæmorrhage. He got weaker, and died on the 16th, twenty-four days after the operation. *Autopsy.*—Stump and seat of fracture in thigh were the only parts examined. No appearance of hæmorrhage from the stump; granulations pretty healthy. On making an incision into the thigh, a pint or more of pus, mixed with blood, with which the ends of the fractured bone were bathed, escaped. No attempt at union had taken place. Ends of the bone denuded of periosteum, white, and sonorous when struck, and a line of demarcation was just perceptible where exfoliation would have taken place. *Case* 7.—A boy, aged 13. His arm had been torn off, just below the shoulder-joint, by machinery. The head of the bone was therefore removed, and flaps made to cover it. He had sustained other injuries,—fractured ribs with emphysema, and also a fracture of the right thigh-bone.

PLASTIC OPERATIONS.

Case 1.—Cheltenham General Infirmary: Dr. Wright.—An infant, aged 3 months. Harelip. Cured. *Case* 2.—The Leicester Infirmary: Mr. Benfield.—A female infant, aged 4 months. Double harelip. Two harelip pins and twisted suture. On the third day there was only little union at the upper part of the wound. Pins removed. It subsequently burst open and gaped as widely as before. A piece of bone and two incisor teeth were removed. *Case* 3.—The Leicester Infirmary: Mr. Macaulay.—Single harelip. Operation as usual. Three days later the wound burst open. It was brought together but did not unite. *Case* 4.—The Chester Infirmary: Mr. Essex Bowen.—A strong, healthy girl, aged 20. *Case* 5.—The Hull Infirmary.—A woman, aged 25. Cleft of the soft palate. An operation had been performed previously, but the parts did not unite. The edge of the fissure was pared and the parts brought together by three silver wire sutures. The muscles of the palate were not divided. The case did well, there remaining only an aperture the size of a pin's head. *Case* 6.—The Leeds General Infirmary: Mr. Hey.—A boy, aged 9. Single harelip. Good union. *Case* 7.—The Sussex County Hospital: Mr. Blaker.—A male infant, aged 5 months. Harelip. The usual operation. Good union. *Case* 8.—The York County Hospital: Mr. Husband.—An infant, aged 8 months. Harelip. Relieved. *Case* 9.—The Liverpool Royal Infirmary: Mr. Long.—A woman, aged 22. Staphyloraphy. Cured. *Case* 10.—The Chester Infirmary: Mr. Essex Bowen.—A strong healthy girl. Fissure fully one and a-half inches long. Defect extending to hard palate, sufficient to produce an indentation at its posterior margin. Roof of mouth considerably arched, increasing the difficulty of access. The margin of the cleft was entirely removed with a bistoury, and brought in apposition along the middle line by means of four silken sutures. Owing to the partial deficiency in the posterior margin of the hard palate, it was found impracticable to close the fissure at that end. On the fifth day the sutures were removed, and it was found that with the exception given,—and at the uvula,—the union was sound and complete. The girl's power of articulation was, at once, markedly benefited by the operation, and the improvement has been progressive. *Case* 11.—The Chester Infirmary: Mr. Brittain.—A healthy girl, aged 20. Fissure in the middle line, an inch and an eighth long, and limited to soft palate. A flattened, broad formation of the roof of the mouth, was favourable to the operation. The edges of the cleft were pared with a bistoury, and three silken sutures were passed across it at a moderate distance apart, and at about half an inch from the margin of the fissure. The bleeding was very trifling, and the raw surfaces were brought together without much tension. On the fifth day all the sutures were removed, union having been completed *Case* 12.—The Chester Infirmary: Mr. Essex Bowen.—A female infant, aged 4 months. Single harelip. There was considerable adhesion of the rudimentary lip-sides and cheek to the subjacent bone. This was freely separated on either side, and the parts thus more readily brought into apposition. Two needles were found sufficient. On the fifth day the needles were removed, and in the course of another day or two union was completed. *Case* 13.—The Leeds Infirmary: Mr. Teale.—A boy, aged 7. Cicatrices of face and neck,

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following a severe burn. Mr. Teale had previously performed his operation for the restoration of the lower lip. Two broad bands of cicatrix bound the chin to the sternum. That on the right side was divided, and the gap filled up with a flap of healthy tissue taken from the chest. The whole flap, about four inches by three, united, and great relief followed. Mr. Teale divided the band on the left side, transplanting a flap, as before, from the point of the chest. Good union occurred, and the boy can now raise his head in the erect position, and retain his saliva with ease. Recovery. *Case* 14.—The Leeds Infirmary: Mr. Teale.—A girl, aged 6. The arm was fixed in a perfectly flexed position by a cicatrix at the elbow, the result of a burn. Mr. Teale freely divided the band, and supplied its place by a flap of healthy tissue dissected from the arm. The whole united, and perfect freedom of motion was obtained. *Case* 15.—The Leeds Infirmary: Mr. S. Hey.—A child, aged 2 years. Operation for single harelip. Union perfect. Had been operated on unsuccessfully in the country when three months old. Recovery. *Case* 16.—The Leeds Infirmary: Mr. Teale.—A girl, aged 7. The right half of the lower lip had been destroyed by cancrum oris. A raw surface having been made by the removal of the cicatrix, a new lip, taking from the check, was built upon it, and united to the sound half by a harelip pin, in the median line. Union by the first intention took place, and a perfect lip was obtained. Recovery. *Case* 17.—The Leeds Infirmary: Mr. Smith.—A boy, aged 7. The right elbow was fixed in a bent position by a very extensive cicatrix, the result of a burn. The band was divided, and two flaps raised, one from the inner aspect of the arm and the other from the outer surface of the forearm, and laid so as to fill up the gap. The flap taken from the arm sloughed, but that from the forearm, having united well, stretched to such an extent, that almost perfect extension of the limb was obtained. Recovery.

LITHOTRITY.

Case 1.—The Nottingham Hospital.—A man, aged 59. Symptoms of stone for three years. General health good. Lithotrity. But few fragments came away. He was discharged, at his own request, in the same state. *Case* 2.—The Leeds General Infirmary: Mr. Teale.—A healthy man, aged 23. He has been twice operated on for stone. On this occasion, his symptoms had existed for a few weeks only. A small stone was found and crushed. After a few fragments, weighing five ounces, were passed, his sufferings ceased. Recovery.

Fatal Cases.

Case 3.—A very feeble man, aged 70.—He had internal piles, which bled frequently and freely. He had suffered from stone nine years. Lithotomy was considered to be inadmissible. The first crushing gave rise to very little suffering, and was followed by the escape of phosphatic fragments weighing forty-five grains. Seventy-two hours after the second crushing, he died with symptoms of peritonitis. At the autopsy were found phlegmonoid inflammation of both kidneys. Purulent peritonitis and infiltration behind the bladder produced by the escape of an encysted calculus between the coats of the bladder. Four calculi were found in the bladder. They were all composed of phosphate of lime, and weighed one ounce. The prostate was very large, and the bladder contracted and thickened.

THE HULL INFIRMARY.

UTERINE TUMOUR—REMOVAL BY LIGATURE—DEATH BY EXHAUSTION.

(Under the care of Dr. KING.)

[Reported by Mr. Evans, House-Surgeon.]

A feeble old woman, aged 72, a widow and mother of a family, admitted on March 28th. She stated that she had suffered from prolapsus uteri ever since her last confinement twenty years ago, and for the last few months from procidentia. (The autopsy rendered this very doubtful.) There was a large tumour, the size of a fœtal head, projecting from the vulva, exuding a fetid, bloody discharge, the lower part of it being dark and sloughy.

April 9.—Remains very feeble; is anxious to have the tumour removed. Wine ʒvj.

17th.—The mass was ligatured in the following way, the ligature being applied as high up as possible:—A strong needle, carrying a loop of whip-cord, was passed through the pedicle of the tumour horizontally, and the ends tied together tightly above and below; the same operation was then repeated, the needle being passed vertically. An opiate at bedtime.

18th.—Had a very fair night. Patient rather restless, otherwise comfortable. Tumour very dark.

21st.—She is much affected by the opiate; very feeble. Will take but little nourishment or stimulants. Tumour now quite black.

She got weaker, and died exhausted on the 23rd.

Autopsy.—The uterus was in its natural situation and of normal size, its outer surface being studded (four or five) with small whitish fibrous tumours; in the tissue of the fundus was one the size of a marble, all the others smaller. The upper part of the vagina was in a sloughy state as regards its mucous membrane. The pedicle of the tumour when drawn down was seen to be as yet not divided by the ligature. The mass itself was shrivelled up. Abdominal organs healthy. No further examination made. The tumour removed was thus doubtless one of those fibrous tumour, arising from the interior of the fundus, and descending and increasing in size till it made its appearance externally.

TUMOUR IN THE ABDOMINAL WALL—REMOVAL—DEATH.

(Under the care of Dr. KING.)

[Reported by Mr. Evans, House-Surgeon.]

A healthy-looking man, aged 68, for twenty years an overlooker in a colour manufactory, always hitherto enjoyed good health, admitted on November 20.

There is a rounded prominent tumour, the size of an apple, three inches below the right ribs above and to the left of the umbilicus. It is hard, pretty loose, as to its connexions below; the integument over it tight and adherent, and of a purplish colour. Resonance all round except just below the ribs. Edge of liver not felt below them. Pulsation of abdominal aorta and other main arteries very forcible.

First noticed the tumour fifteen months before, when it was the size of a marble. No pain in it at that time, but since it has occasionally been the seat of severe pain. It has grown rather rapidly of late. He has met with no injury to the part. Has got much thinner during the growth of the tumour.

Cancer of abdominal walls was diagnosed.

November 21.—A curved incision, four or five inches long, was made on either side of the tumour across the abdomen. It was firmly adherent to the fascia covering the rectus muscle, the fibres of which were exposed. Wound brought together by iron wire sutures. An opiate at bed-time.

23rd.—Ordered, brandy ʒiij. Full diet.

December 1.—No union by first intention has taken place, but all the sutures have sloughed out, and the wound looks inflamed and irritable. ℞ Lotio zinci sulph., outward application.

5th.—Wound looks dry and unhealthy. Ung. terebinth. Wine ʒiv in addition to brandy.

8th.—There is much feverishness, with foul tongue. ℞ mist. salin. 3tis. horis, c. pil. cal. c. opio. vespere. Great irritability and restlessness, tendency to hiccup, and violent stabbing pain over right lower ribs. Evident extension of inflammation to pleura, but no friction sound audible. (Emp. lyttæ lateri dextro.) He passed a bad night, and died rather suddenly next day at 12·30 a.m. No autopsy permitted.

Tumour hard on section; cut surface presented fibrous stroma with small interstices filled with yellowish, gelatinous-looking matter.

PLASTIC OPERATION ON THE FACE FOR DEFORMITY CAUSED BY A GUNSHOT WOUND—GOOD RESULT.

(Under the care of Dr. KING.)

[Reported by Mr. Evans, House-Surgeon.]

Alfred E., aged 11, was admitted February 21, 1860, for the purpose of having an operation performed in order to lessen the deformity of his face, caused by a gun-shot wound.

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The accident had happened nine weeks before, and the wounds had all healed under the care of a Surgeon in the country. The contents of a gun, loaded with paper etc.(but not shot), had entered his mouth and then burst forth again, dividing his face "into four quarters," as his father expressed it, or rather the upper portion into two. There was a horizontal cicatrix across the middle of each cheek, the nose was flattened level with the surface of the face, the alæ projecting backwards into the mouth, and the columna gone. The right eyelid was drawn down, nearly covering the eye, and making it appear much below the level of the left one, its pupil being always much dilated. The cheeks above the horizontal cicatrices were very prominent. The upper jaw was deficient in front for nearly an inch in width; the upper lip to a much greater extent. He swallowed with some difficulty, and spoke very indistinctly; all the movements of the tongue during deglutition and speech were visible.

He had a slight attack of erysipelas soon after admission, which delayed the operation. It speedily subsided under the use of the tincture of the sesquichloride of iron.

February 21.—A vertical incision was made on each side the nose, liberating it from its attachments below, two of the front teeth having first been extracted from the upper jaw. A horizontal incision was then made across each cheek, terminated by a short one in a vertical direction. Each cheek was then reflected upwards to some extent, and thinned by removal of tissue from its attached surface, so as to allow of their being brought together in the mesial line. This was now effected, their approximating edges having been previously pared, they were kept in position by two hare-lip pins. The horizontal incisions in the cheeks were then united by silver wire sutures, except at their outer extremities, which, for the purpose of preventing too much tension, were left open to granulate. A considerable quantity of blood was lost; all the vessels were secured by torsion. Ordered an opiate enema at night.

25th.—The two hare-lip pins were taken out, and perfect union was found to have taken place.

March 12.—He was sent home into the country, to return again in a few months' time, in order to have some further operation done for the improvent of the nose. This was more prominent than on admission, and the mouth less exposed. The wounds in the cheeks had healed, with the exception of the outer ends, which were granulating.

He was re-admitted in the middle of May.

May 22.—Each ala of the nose was now planted into the cheek of its own side, fine silver wire sutures being employed. At the end of the mouth the parts had united, but there was a small round opening, a line in diameter, on the left side of the nose, at its junction with the cheek, union at this point having failed. A very great improvement in his appearance had resulted from the two operations, the gap in the upper jaw, or rather at the upper part of the mouth, being completely done away with, and the cheeks rendered less prominent, the right eye being at the same time brought more on a line with its fellow. He went home at the end of May.

EXCISION OF GROWTH FROM ARM—NATURE DOUBTFUL (KELOID?).

(Under the care of Dr. KING.)

[Reported by Mr. EVANS, House-Surgeon.]

Mary W., aged 34, a cook, unmarried, of sallow, unhealthy appearance. On the front of the right upper arm, near the shoulder, was an oval-shaped patch of integument, the size of a halfpenny, florid and streaked with vessels, raised slightly above the general surface, but perfectly flat, smooth, and hard to the touch, having somewhat the appearance of a cicatrix, but with no puckering of the skin. It was not particularly tender, but the seat of stabbing pain at times. Five or six years before, she struck her arm against a piece of iron, a year after which she first noticed a little swelling the size of a pea. It increased in size, and was removed by a Surgeon last June, when it was nearly as large as a walnut. The wound quite healed, but the tumour grew again, and the operation was repeated, caustic being afterwards applied to it. She says it is now increasing in size, having commenced to grow for the third time. It was removed by an elliptical incision, care being taken to go wide of the disease, and the wound united by iron wire sutures. It had quite healed by December 9th, and she was discharged on December 20th.

GUY'S HOSPITAL.

TREATMENT OF NEURALGIA BY EXCISION OF A PIECE OF NERVE.

Severe Neuralgia of the Parts supplied by the Musculo-Cutaneous branch of Peroneal Nerve—Division of the Nerve above the Malleolus—Temporary Cure—Relapse—Excision of a part of the Trunk near its exit from the Fascia, with much benefit.

(Under the care of Mr. HILTON.)

[Reported by Mr. J. STAFFORD BENSON.]

Mary H., aged 64, a widow. She had had nine children. When pregnant each time the right thigh and leg swelled to a considerable size, the veins became very much enlarged, and she had a most excruciating pain from the knee to the foot, confined chiefly to those parts supplied by the peroneal nerve. All these symptoms disappeared, however, immediately after delivery, and did not recur until the next pregnancy. Eighteen years ago she was suddenly attacked with very severe pain, much of the character of cramp, immediately in front of the external malleolus, extending over the dorsum of the foot and all the toes excepting the great toe, inner side of the second, and outer side of the little toe, thus clearly marking the distribution of the musculo-cutaneous nerve. This pain occurred at intervals of two or three days, gradually increasing in severity, and the intervals becoming shorter. There was no history of injury, nor could she account for it in any way. Several Medical men were consulted, and many lotions and ointments had been applied without affording the slightest relief.

Two years and ten months ago she was admitted into the London Hospital, under the care of Mr. Luke, who cut down and probably divided the nerve about two inches above the external malleolus. The wound healed rapidly, and the pain disappeared entirely, but returned, however, at the end of six months, suddenly and with equal severity. She then applied to Mr. Luke a second time, who advised another operation, to which the patient would not submit. A plaster (probably belladonna) was applied without relief. She continued to suffer intensely, but did not seek further advice until she was admitted into this Hospital, which was on February 13, 1861.

On admission she complained of most excruciating pain in the tract of the musculo-cutaneous nerve, commencing near the spot where the nerve pierces the fascia on the outer side of the leg, and extending to its final distribution at the toes. The pain recurred at intervals of two or three hours, each attack lasting from half to three-quarters of an hour. The whole leg was carefully examined by pressure, but nothing could be discovered to account for the pain. The blunt end of a probe was passed along the whole tract of the musculo-cutaneous nerve, and pressure made upon it at very short distances, producing no discomfort until the probe was placed upon one small portion of the old cicatrix, and then the patient would shriek with pain. Pressure with the finger in front of the malleolus, below the cicatrix, would bring on a paroxysm of pain.

February 17.—While the patient was under the influence of chloroform, Mr. Hilton made an incision about two and a-half inches in length on the outer side of the leg between the outer edge of the extensor longus digitorum and inner edge of the peroneus longus, immediately down to the trunk of the nerve, just at its exit through the fascia. He removed about two inches of the trunk of the nerve, including that portion which was found intimately adherent to the old cicatrix, and required careful dissection to separate it. On tracing the exposed nerve downwards, it was found to be divided into two branches,—one passed into the cicatrix, and the other between the cicatrix and the fibula; the branch which traversed the cicatrix was cut just below the cicatrix, where the nerve became again free from adhesions, and the other branch was cut off parallel with it. The wound was closed by three stitches, and secured by two or three narrow strips of plaster and bandage.

19th.—The wound looked very much inflamed and disposed to slough; the stitches were removed, and the edges allowed to gape, to give free exit to the discharge; a linseed poultice was applied. Four grains of calomel and one of opium were given at bed-time, and a rhubarb draught in the morning. A draught

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containing ten drops of liquor opii and three grains of quinine, was ordered every six hours. Irrigation was now employed uninterruptedly, and continued until February 28, when an opiate lotion was used. Under this treatment the wound rapidly healed.

March 25.—The wound has entirely healed; but as she has some pain on the dorsum of the foot, a liniment containing equal parts of tincture of aconite and chloroform was applied to it, and to the ankle; this appeared to afford considerable relief to the pain. She left the Hospital free from the pain at the seat of operation, but had some neuralgic pain on the inner side of the foot.

The following is Mr. Durham's report of the examination of the portion of nerve removed:—

"The portion of nerve submitted for examination presented no manifest abnormal appearance. Its blood-vessels were very full, however, but this was probably due, in great measure, to the pressure, etc., to which the nerve had been subjected previous to the operation.

"The nerve appeared to have been divided above, just where it pierced the fascia, and below about half-an-inch beyond its bifurcation. On careful examination the larger branch appeared somewhat dilated, and of a pinkish colour, just above and about the cut extremity. From this part, also, the nerve sheath was separated with comparative difficulty. On microscopical examination the nerve filaments were found to be normal in size and appearance throughout. In the lower part were found some exudation corpuscles and fibroplastic elements, but these were not abundant."

Remarks.—Mr. Hilton said that he had some few years since excised a portion of this same musculo-cutaneous nerve, about one inch in length, from the same position in the leg as in this case. The patient was under the care of the late Dr. Golding Bird, who had employed during many months all that science and experience could suggest, without any permanent benefit. The patient, a female, aged 23, had suffered for a long time violent attacks of neuralgia, commencing in this nerve, and followed by slight epileptic seizures. The nerve was tender, and painful on pressure about two inches above the external malleolus. He (Mr. Hilton) excised one inch and a-half of the nerve, including the tender part. This put an end to the neuralgic and epileptoid attacks.

Dr. Golding Bird saw this patient well two years after the operation. The portion of nerve excised was found to be enlarged, and spread out, rather flattened and more vascular than natural at the part which had been painful; above that part the nerve was to all appearance healthy.

KING'S COLLEGE HOSPITAL.

EXCISION OF THE SUPERIOR MAXILLA—CLINICAL REMARKS.

(Case under the care of Mr. FERGUSSON.)

The following particulars of this interesting case were gathered from Mr. Fergusson's clinical remarks after the operation. The patient was a woman, aged 38. She had for thirteen years had more or less disease about the right upper maxilla, and seven years ago a tumour had been removed from the cheek. This was, Mr. Fergusson believed, probably not connected with the jaw. He had first seen her twelve months before. There was then, in addition to the disease of the jaw, a tumour situated over its front aspect, free and moveable. This was an unusual complication, and rendered the case, as Mr. Fergusson then believed, one unfavourable for operation, as suggesting malignancy. There was no enlargement of the glands of the neck; but this, he said, was not common even in cases decidedly malignant. She was sent to him with a view to an operation, but he did not recommend it. He expected that the disease would rapidly progress, and that her life would be short. He was, therefore, somewhat surprised to see her again one day lately, presenting no change in general appearance. He was, therefore, induced to consider the operative aspects of the case more carefully. There was some increase in size, and projecting into the mouth through the hard palate was a soft, elastic, rounded mass. It had also ulcerated, and there was a sloughy, ulcerated condition of the palate round it. He was able to squeeze his fingers into the antrum, or, at least, into a space above the palate. She could blow through both nostrils, and thus it was seen that these parts were free. As he found that the disease had made such slow progress, and that her constitution continued good, he determined, as it was a question of life or death, to attempt the removal of the disease.

In reference to the operation Mr. Fergusson said, that he had many debates as to the best method of proceeding. He was not able to adopt in this case, on account of the great extent of the disease, his favourite incisions. His usual plan was to make an incision in the centre of the lip, and then to carry it into the nostril on the side affected, and dissect up the lip and ala nasi in one piece, or if more room were required, to carry the incision on the outside of the nose, and then dissect up the lip and cheek. In the present instance, however, the incision required to be more extensive, as he had to remove most of the upper jaw, and also part of the soft palate; therefore, in addition to those above-mentioned, Mr. Fergusson carried an incision outwards about a quarter of an inch below the orbit. This plan was, he said, much to be preferred to the method often practised of carrying an incision outwards and upwards from the angle of the mouth. On reflecting the cheek the superficial tumour was exposed and squeezed out of its capsule. It was, as predicted, quite free. The bone was chiefly removed by the bone-pliers and cutting forceps. Mr. Fergusson, however, first by the saw weakened the attachment of the superior maxilla to the malar bone, and applied it also to the alveolar border of the bone near the middle line. Having done this he broke away the alveolar ridge and removed it, and then, piece by piece, removed the whole of the bone, except the orbital plate, and that forming the upper part of the antrum. On subsequent microscopical examination, it was found that the tumour was not malignant.

ADMINISTRATION OF CHLOROFORM BY THE NOSTRIL IN OPERATIONS ON THE MOUTH, &c.

In the above case the patient was kept fully under the influence of chloroform by Dr. Sansom, by means of chloroform inhaled through the nostril. This was first done in London by Dr. Richardson, in a case where Mr. Spencer Wells removed half the lower jaw. Dr. Sansom's method is a modification of that adopted by M. Faure, and described by him in *L'Union Médicale* for 1860. He employed it in all cases in which chloroform was to be given, and designed that the mouth should be closed, so that one nostril should receive the tube conveying chloroform vapour, and the other should remain patent to the external air. By these means he felt assured that due dilution of the chloroform vapour in the lungs would be attained. Dr. Sansom adopts a somewhat modified method only for prolonging anæsthesia in cases of operation in which the ordinary means for the exhibition of chloroform interferes with the manipulation of the operator, in operations on the mouth, etc. The apparatus is simple. A glass reservoir, capacity two ounces, is connected at its upper part with two tubes; one of glass very short, of nearly half an inch in diameter, and terminating in a funnel-shaped extremity open to the air; the other a flexible tube, of one quarter of an inch in diameter, and about eighteen inches in length, with an extremity adapted to the patient's nostril. The patient is first brought under the influence of chloroform in the usual way. When the operator commences the manipulation upon the mouth, a drachm of chloroform is poured into the glass reservoir through the funnel-shaped extremity of the glass tube; the reservoir is then shaken so as to project the chloroform against the sides, and thus favour the evaporation. The flexible tube is then pushed up one of the nostrils of the patient, so far as it will penetrate with gentle force. The patient now breathes by one nostril air impregnated with chloroform vapour, by its passing over the evaporating surface in the reservoir, and by the other nostril and by the mouth pure atmospheric air. The free nostril is used as a valve to be closed or left open according as the patient requires more or less of the anæsthetic. The mouth remaining open there is quite sufficient dilution with air ensured, although the free nostril be completely closed. The flexible tube admits of the apparatus being moved anywhere out of the operator's way. In the present instance the patient was kept well under the influence of chloroform, the administration not interfering at all with the operation.

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CASES OF STONE IN THE FEMALE.

WEST NORFOLK AND LYNN HOSPITAL.

The patient, a woman, aged 30, was admitted under the care of Mr. Marsters Kendall, on August 27, supposed to be suffering from uterine disease. On examination, however, a calculus of apparently considerable size was found to be present. The stone was crushed for the first time on December 17, and very effectually, much *débris* being passed. The symptoms were mitigated, but on sounding large pieces of calculus were plainly distinguishable, and the lithotrite was again used with very excellent effect. She was very much relieved after this, and was made an out-patient. On November 25, she was re-admitted, and for the third time the lithotrite was used, and the remaining portion of the calculus effectually broken up. She had very slight incontinence of urine, and continued to improve rapidly. No incontinence of urine remaining when last seen.

ADDENBROOKE'S HOSPITAL, CAMBRIDGE.

In this case Dr. Humphry crushed a stone in the female bladder of a little girl, aged 7. She recovered.

The above two are all the cases of operations for stone in the bladder of the female in our Statistical Report.

Medical Times and Gazette.

SATURDAY, MAY 25.

PRESCRIBING FOR HOSPITAL OUT-PATIENTS.

Last week we endeavoured to teach Hospital Committees that the Medical Staff of all our large Hospitals must be much increased. The increase must be made; but it may not be just yet. In the meantime we offer what we hope may prove to be a few useful hints to those who are engaged in the laborious, and often unsatisfactory, duty of treating Hospital out-patients. Laborious, we term it, because the number of cases to be seen at any one time is usually great; and unsatisfactory, because this number is generally out of proportion to the time available for their due investigation. Furthermore, we often know little or nothing of the results of cases treated, and even when we do happen to know them, we can rarely feel sure to what extent they are attributable to the remedies prescribed. It is one of those duties in which we must not grudge a large expenditure of labour to secure a small and uncertain per-centage of good.

We restrict this article to the endeavour to show that if, in the discharge of the duty above mentioned, an Hospital Physician or Surgeon has at heart the convenience and the welfare of all the parties with whom he is brought into official relation, his treatment of his patients will be conducted with a due regard to these three points: the circumstances and habits of his patients; the convenience of the dispenser; the economy of the institution to which he is attached. Practical experience of a Dispenser's duties, a knowledge not merely of the medicinal, but also of the money values of drugs, a familiarity with the ways of the poor derived from personal intercourse with them, are points upon which, perhaps, hardly sufficient stress is laid in our Professional Education. The want of this kind of knowledge in any one holding an Hospital appointment is invariably felt by the parties with whom his appointment brings him into relation, viz. those who dispense, those who are intended to take, and those who have to pay for the medicines he prescribes. We purpose offering some remarks in illustration of these points, begging the reader to remember that they apply to out-patient, not to in-patient practice.

1. As to the necessity of ascertaining, as minutely as our time will permit, the circumstances and habits of the patient for whom we are about to prescribe. At most Hospitals, more especially those of London, a certain number of the applicants for Medical aid will be poor creatures in extreme poverty and destitution, probably living in miserable, crowded hovels, with bare necessaries, and no comforts. To give persons in such a plight, directions which presuppose conveniences they cannot procure, is more than thoughtless; it is a cruel reminder of their pitiable condition. While to give them *directions* they cannot follow is thoughtless and unfeeling, to give them *remedies* which they cannot or will not apply is simply a waste of Hospital property: nay, worse, if these remedies are articles of domestic use and re-saleable, one sets before them the temptation of doing what is very commonly done, viz. taking them away and turning them into cash. It is well known that large quantities of linseed meal, mustard, lint, cotton wool, oil-silk, leeches, cod oil and castor oil, are daily taken away from Hospitals simply to be resold or else bartered at some general dealer's or dishonest petty chemist's. The recollection of this should make one very careful about ordering such medicaments to any patients whom, from knowledge of their destitution or reasonable suspicion of their knavery, we think likely to apply them to purposes other than those we intend (a). Medical men, who have had much experience in the Hospital out-patient room, can generally make a shrewd guess, whether an applicant for Medical relief is really eager to get cured, or whether he is an old Hospital-monger, come for what he can get in the way of re-saleable goods.

Considering how obvious is the necessity of ascertaining the daily habits of the patient for whom we are about to prescribe, one is surprised to find it so frequently overlooked. Times out of number have we seen a mixture prescribed three times a-day, four times a-day, and even every four hours, for a poor labouring man who was at work, away from his home, from morning till night. Instances of similar want of thought might easily be multiplied without end. They would all tend to prove what common sense suggests, viz. that we must so far as we can, and often further than we like, adapt our treatment to our patients' circumstances and habits, since it is rarely they have the power to alter these latter to suit *us*.

While upon this subject, we will offer two hints to Prescribers, which we think will prove of practical use. First: in every case, to tell the patient distinctly, not merely how often in the day his medicine is to be taken, but also to *specify the particular hours at which it is to be taken*. Experience shows that the less we leave to our patients' discretion in this matter, and the more explicit we make our directions, the greater will be the chance of our having them observed. Secondly: before writing a prescription, to see that the patient's bottle is large enough to hold the quantity of medicine about to be prescribed. If it be *not* large enough, it will cost the prescriber but little trouble to order his doses in a smaller bulk of fluid, while it will save the patient the trouble or cost of getting a second bottle, and the nuisance of losing his turn at the dispensary-window in so doing.

2. Our next point is the consideration of what is due to the Dispenser. We believe it hardly possible for a man, for some hours together, to get through a greater amount of simultaneous hard mental and manual work than does a good Dispenser at a large Hospital on an out-patient day. Trying as this same work is under any circumstances, it is too often rendered doubly so by the want of consideration shown by those who *write* the prescriptions, and who either cannot or will not put themselves in the position of those who *dispense*

(a) As to cod oil and castor oil, a very simple way of rendering *them* valueless for the purposes of sale is to colour them with cochineal.

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them. This want of consideration may be evinced in a disregard—

α. Of the Dispenser's time and convenience—for instance, in writing prescriptions which, either from their illegibility or incompleteness, occasion doubt in the Dispenser's mind as to the prescriber's meaning or intention—or which so deviate from the usual Hospital formulæ that he cannot keep the ingredients ready mixed. It is rather hard, when a Dispenser has perhaps some fifty patients eagerly waiting to be served, for a Medical man to extemporise prescriptions, needing much time and manual labour to amalgamate their ingredients (as pills, powders, ointments, electuaries, etc.) The obvious way to avoid this evil is for the prescriber, on all occasions, to adhere as far as possible to certain formulæ. Whether these formulæ be private, or those of his Hospital Pharmacopœia makes no difference, provided he gives the Dispenser due notice that he intends employing them. Of course, when special cases occur, our prescriptions must, at all cost, be suited to their special requirements. What we are here condemning is *needless, wanton departure from recognised formulæ.*

Prescriptions should always be written, and directions given, so clearly and explicitly, that no need may arise for conversation between patient and Dispenser. Nothing is more common than to hear patients worrying the Dispenser with inquiries, which would have been wholly unnecessary had their Medical men along with the prescriptions given them full and clear information what to do. No kind of work demands, for the time, closer attention than good—*i.e.* quick, neat, and accurate—dispensing. Now, if the Dispenser's attention is to be distracted by answering a variety of questions which, besides being no part of his proper duties, he feels to be occasioned solely by his superior's remissness, it is too much to expect that his work will be well done. Another way, in which much annoyance and loss of time are occasioned to the Dispenser, is by the Prescriber's sending him verbal messages by patients. How is the Dispenser to know what alteration or addition the message may have suffered in its transmission? What safeguard has he that it is not a mere fabrication of the patient himself? Had the said message been written in black and white, what perplexity would have been saved! In some Hospitals a speaking-tube is carried from the Prescriber's desk in the out-patient room on to the dispensing counter, and a great convenience it is found to be, enabling Prescriber and Dispenser to hold instant communication, when the one requires any information from the other.

β. A Dispenser has sometimes as little regard paid to his personal feelings as he has to his time and convenience—as when, for some (perhaps trivial) error in his work, he is openly reprimanded before a number of patients—or, in fact, whenever the Prescriber, in a patient's presence, says or does anything which implies his distrust of the Dispenser. The invariable effect of so doing is to lower the Dispenser in the patient's eyes, and deprive him of that hold on the patient's confidence which he is as ambitious to possess, and to which he is (in his province) as justly entitled, as the Prescriber himself. Faith in the medicine will do wonders towards helping the cure, but a patient cannot possess this faith unless he is quite satisfied that the medicine has been accurately dispensed as well as appropriately prescribed.

When a mistake has been made, and the cause is not immediately evident, we should think of the possible ways in which it may have occurred before we cast the blame of it upon the Dispenser. The following is not an uncommon occurrence:—A patient complains to his Medical man that the quantity of medicine given him by the Dispenser has been insufficient to last the number of days for which it was prescribed. The matter is then investigated. One party declares he has *taken* no more than the prescribed dose, the other party declares he *gave* in full the prescribed number of doses. The Medical man knows not which to believe, but oftener than not, either by word or look, expresses some distrust of the Dispenser's accuracy. Now, the probability is that, in nine cases out of ten, the mistake will have been on the side of the patient, not of the Dispenser. Poor people, as a rule, measure their medicine most inaccurately. Numbers of them do not measure it at all, but merely take an occasional drink out of the bottle in which it is contained. We do not for a moment maintain that a Dispenser is not to be reprimanded when he deserves to be. Reprimand him as often as he gives occasion, but never in the presence or hearing of those whose confidence it is not only desirable, but necessary, that he should retain. No Medical man would like a blunder of his own to be exposed to his patients; what right, then, has he to expose those of his Dispenser?

It may be thought by some that too much has been made of this matter; but all those who have had much to do with dispensing will, we feel sure, allow that the remarks are by no means uncalled for, and that, in the dealings of Medical men with their Dispensers, the golden rule, of doing as one would be done by, is very often forgotten.

3. We come next to the consideration of economy in Hospital prescribing, a subject generally as unpalateable to those who order medicines, as it is welcome to those who have to pay for them—the former not liking any restriction in their choice of remedies, the latter eyeing with dissatisfaction any very costly items in their drug bills. There are an immense number of details in which a saving of Hospital money may be effected by those, who have at their disposal its medicines and medical appliances. The subject is far too wide to admit of our doing more at present than offer a few passing remarks on those medicines which are usually found more than any others to swell up Hospital drug bills.

Quinine.—The most expensive form is the bleached crystallized Sulphate of Quina, which at present cannot be purchased under 10s. per ounce. An unbleached form of the same may be had for 8s. per ounce. But by far the least expensive preparation is the amorphous Sulphate of Quinoidine, a dark syrupy fluid, six minims of which are equivalent to one grain of the crystallized Sulphate of Quina. We believe the Quinoidine to be as good as the latter from repeated and careful observations (1) of its general effects as a tonic; (2) of its specific effects as an anti-periodic, in ague, etc.; (3) of the symptoms which it produces when taken in large doses, which are precisely the same as those produced by large doses of the more costly preparation. The Quinoidine will keep any length of time, and is little more than one-fourth of the expense of Howard's crystallized sulphate.

Cinchona Bark.—Most Hospitals use the *pale*, which is generally about 1s. 6d. per pound cheaper than the *red*. It is at least doubtful whether the difference in medicinal value between the two is as great as the difference in their respective cost.

Oleum Morrhuæ.—The dearest kind is the best pale Newfoundland. The two cheapest kinds are the pale-brown and the dark-brown Norwegian, which have a respective cost (if purchased in large quantities) of about 5s. 3d. and 4s. 3d. per gallon. Of these latter oils, the pale-brown is excellent; in colour, flavour, and medicinal effect, being generally allowed to be equal to the best Newfoundland. The dark-brown is inferior in colour and flavour, but in medicinal value only so far as it is more likely to disagree with a delicate stomach. Where it is tolerated, patients soon get fond of it, and derive just as much benefit from its use, as they do from the more costly kinds. Such at least is the conclusion which experience has forced upon ourselves, and which, we believe, will be endorsed by the majority of those most competent to

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decide upon the matter, viz., the Medical Officers of our Consumption Hospitals.

Spirits of Wine, as consumed in Tinctures, Æthers, Liniments, and other preparations. The great advance recently made in the price of spirits tells heavily on Hospital drug bills; and those who are anxious to economise the funds of the institution to which they belong will do well to employ as sparingly as possible medicines into whose composition spirit largely enters. (a.) *Tinctures*.—Most of these are medicines of such value that there is little room for economy in their employment. We may, however, in Hospital practice abstain from prescribing these tinctures, which do little more than answer the purpose of a placebo. (b.) *Æthers*, according to the London Pharmacopœia, must be prepared from pure rectified spirit, but they *can* be prepared from methylated spirit. The æthers made by this latter process, on account of their much greater cheapness, are now used in some institutions. What seems to deter Medical men from more generally adopting them in Hospital practice is a doubt whether they are as pure and as efficacious as those prepared according to the Pharmacopœia. We have seen the methylated æthers extensively used, and are inclined to consider them just as efficacious as the others. As to their purity, when we remember that in all medicines of this class *chemical decomposition* takes place in the spirit employed in their preparation, we have fair ground for supposing that anything objectionable in the spirit itself will not reappear—or, at any rate, will be hardly appreciable—in the products of its decomposition. Chloroform, at any rate, when intended only for external use, might just as well be prepared from methylated spirit. There is one consideration which should lead us to exercise the utmost care and discrimination in the use of æthers, tinctures, aromatic spirits of ammonia, and such like medicines: it is this, that patients who once become accustomed to these medicines will not do without them, or, at any rate, will rarely take any other medicines having less of the character of cordials. If given in pretty full doses they are as good as a dram, and after a time will be taken by patients simply for the sake of the agreeable, pungent stimulus, as long as they can get their Doctors to prescribe them. (c.) *Liniments*.—Two of the liniments in the London Pharmacopœia would probably be ordered much more sparingly than they usually are, if prescribers thought for a moment of their costly ingredients. They are the "Linimentum Camphoræ Compositum" and the "Linimentum Saponis," the former containing 85 per cent., the latter 90 per cent., of *rectified spirit*. If the mere stimulating effect be all that is wanted, the London Pharmacopœia offers, or the prescriber himself may easily extemporise, other liniments just as efficient and very much less expensive.

These medicines—viz., Quina, Bark, Cod Oil, and the various spirituous preparations—will probably be found to be the most expensive items in any Hospital drug bill. The consideration how far economy may be carried in their administration is a matter of some delicacy. We all have our favourite drugs and our favourite modes of prescribing the same. Suggestions, therefore, which may seem to reflect either on the one or the other are very likely not to be taken in good part. Those who do not agree with the above remarks must bear in mind the spirit in which they are offered, which is not that of a presumptuous disregard of the convictions of others, but a wish to set on foot and invest with some little interest the inquiry how far economy can be pushed in the use of various medicines without any sacrifice of their medicinal value.

THE WEEK.

We are glad to find that a Hot-air Bath has at length been opened in London under Medical superintendence. This bath is a powerful agent, for good or evil—for good if used with discretion, for evil if used in excess, without necessary precaution, or in improper cases. The necessity for intelligent supervision is therefore evident. Now that our Profession is emancipating itself from all connexion with trade, we are certainly not desirous of seeing Medical men become bath-keepers; but we do think that public baths should be under proper Medical superintendence, and that a powerful remedial agent should not be left to the uneducated enthusiasts who have so far supplied a public demand. The Bath to which we have just alluded has been opened this week at Brompton. It is under the superintendence of Messrs. Pollard, two well-known General Practitioners of that district, and it really affords all the comfort and convenience that the most fastidious can require. The ventilation is admirable; the cleanliness most perfect; the attendants well instructed and practised manipulators; and the temperature of the hot-room is not driven up to the absurd excess which has been too common at some other baths. We recommend those of our readers who wish to try the effect of a bath on themselves or their patients to spend an hour or two at Brompton.

The Quarterly Return of Births, Deaths, and Marriages, in Scotland, for the first quarter of 1861, shows at least two classes of facts which ought to lead to practical enquiry, and to efforts at reformation. One is, that the death-rate of the town population is nearly double that of the country; the one giving 271, the other 142 deaths per 10,000 living. This ought to lead the philosophic and religiously-minded Scotsman to enquire into the lodgings, food, and occupation of the poorer part of the town population; and still more, into their opportunities for recreation, whether they are encouraged to go out into the country and breathe the fresh air, or whether they are allowed to remain in their closes and wynds on their holidays. The other fact is, the enormous proportion of illegitimate births in some rural districts, especially in the counties of Roxburgh, Dumfries, Kirkcudbright, and Wigtown.

The Society for the Prevention of Cruelty to Animals has been lifting its voice at its annual meeting against the practice of vivisection. The Bishop of Bath and Wells, who occupied the chair,

"Would not authoritatively assert that no new discovery had resulted from the practice, yet he was sure that a great deal of needless cruelty was perpetrated in the name of science. John Hunter, Sir Astley Cooper, Sir Charles Bell, Dr. Reed, and others had practised vivisection, but the discoveries to which the practice had led were so unimportant that they offered no justification for the cruelties committed. Dr. Reed on one occasion had been very ill, and had been obliged to submit to several very painful operations which he (the Doctor) almost regarded as judgments on himself for the cruelties he had by vivisection inflicted on the brute creation!"

In his sixth lecture at the College of Physicians, Dr. Beale entered particularly on the structure of connective tissue, on which point his observations had forced him to diverge from the views of Virchow. The common theory is that it exists everywhere, as a common bond and matrix to all other tissues. But it can scarcely be said to exist in young animals or in very small animals,—the mouse, for example. It is commonly described as consisting of cells and intercellular substance, the latter being identical with white fibrous tissue; and this has been assumed to be formed by the fibrillation of solidified exudation from the blood. Dr. Beale's researches led him to believe that white fibrous tissue consisted of masses of germinal matter, imbedded in formed material. Of connective tissues there are many varieties, the areolar, white, yellow in various forms and the mucous tissue, as in the umbilical cord and vitreous

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humour. All of these pass by imperceptible gradations into cartilage and bone. In white fibrous tissue the masses of germinal matter are continuous; in cartilage they are discontinuous and isolated by the formed material. Most elementary parts pass into connective tissue. Query: Is it, then, anything special, or is it ill-developed tissue? Virchow believes the cells of areolar tissue to communicate by tubes as in bone, and that the yellow elastic tissue is tubular, thus proving a tubular anastomosing nutritive system, capable also of propagating morbid processes; but such anastomoses are believed by Dr. Beale to exist only as deceptive appearances, and not as realities. The appearance of tendon was particularly shown, with its rows of elongated particles rendered evident by acetic acid, coloured by carmine, and most numerous in the young. Dr. Beale believes that the true interpretation is to be found by calling the nuclei germinal matter, and the white glistening fibres its formed material.

Dr. W. T. Gairdner has commenced a course of twelve popular lectures on "Public Health," at the Surgeons' Hall, Edinburgh. After alluding to the great importance of the modern views of sanitary science, and of the powers of air and water, as factors in health and disease, he said:—

"Can there be any doubt, then, that over the use of air and water by the community, as well as by each of its members, the community is bound to exercise a most jealous guardianship? Can there be a doubt that where epidemic disease rages, or even threatens to become prevalent, the limits of individual freedom have been reached, and the rights of the community require to be protected? Can there be any doubt that in lodging-houses, factories, workshops, schools, churches, Hospitals, railway carriages, steamboats, public conveyances, there ought to be a limit to the power of individuals to pack human beings together in a confined space; or that even in some instances in private houses the more aggravated mischiefs of defective ventilation require to be restrained by authority? Can there be a doubt of the right and the duty of large communities to introduce an ample supply of pure water, to shut up defective and contaminated sources of supply, to regulate the introduction of this beneficent agent of health into private houses, and to see that when there it is maintained in free circulation, and does not stagnate and corrupt to the injury of all? On most of these points I can hardly admit the possibility of a doubt in the mind of the most jealous opponent of centralisation."

At the Society of Antiquaries of Scotland last week, Dr. Mitchell read a paper "On the Superstitions relating to Lunacy in the North-West Highlands and Islands of Scotland, and on some of the Antiquities of Lunacy." Dr. Mitchell commenced with an account of various superstitions connected with holy wells, and especially that on Inch Maree, in a loch in Ross-shire:—

"The insane patient used to be bathed in the well, and then carried out in a boat round the island, being occasionally plunged into its waters, after which—and the leaving of an offering of his clothes on a tree—his cure was expected. Dr. Mitchell read some remarkable extracts from the records of the Presbytery of Dingwall, which showed at various periods of the seventeenth century the existence of a practice of sacrificing bulls at Applecross for the recovery of the health of some patient, on the festival of the Saint, and which called forth many fulminations from the Presbytery, as well as against the going to chapels, adoring of wells and stones, and pouring of milk on hills as oblations. Dr. Mitchell, however, had found that similar practices existed in quite recent times, and that within the last ten years a live ox had been buried in Moray for the health of the rest of the flock. After some curious historical references, which showed that the practice of sacrificing bulls was observed at Kirkcudbright in the twelfth century, and other notices of May Wells, and the old custom of going all over Scotland to them in search of health, and then proceeding to those in England, Dr. Mitchell proceeded to explain some of the superstitions common in the Hebrides relative to epilepsy. Thus a sufferer from this disease was recently put to bed with the dead body of his mother in the expectation of a cure; another drank the water in which the dead body of his sister had been washed; and in another case, on the spot where the patient fell, from his first attack, a live cock was buried with a lock of his hair and parings of his nails as an offering to the unseen power. In Ross-shire a patient lately drank a cupful of his own blood. Dr. Mitchell pointed out many similarities between these and African superstitions relating to insanity and epilepsy."

It is said that there are 4000 blind women in Ireland, and nearly as many blind persons of the other sex. Dr. Wilde states that there is a greater proportion of blind in Ireland than in any other country of Europe except Norway. It is said, too, that there are 1700 blind paupers in the Irish workhouses. There is no doubt but that much of this blindness is strictly preventible by simple cleanliness. This is more especially the case with disorders of the lids and of the conjunctiva, such as trichiasis, inverted hairs, purulent ophthalmia in its several varieties, granular conjunctiva and pterygium.

Now that Medicine is nominally made a "branch of the State," and that we have a paid Council, and that members of the Profession have been taxed for the support of authority, we might expect that the voice of the Council would be heard when any act of injustice is threatened to the Profession, such as the extortion of certificates without payment in Scotland and Ireland. The "Glasgow Faculty of Medicine," however, feel that this important function is *not* discharged, and they are coming forward to remonstrate, and to organise an opposition to this most unjust measure.

REVIEWS.

The Medical Profession: its Aims and its Objects. By A Surgeon. Pp. 24. London: 1861.

Just as Mr. Ruskin issues his critique on the Exhibition of the Royal Academy, so does a "Surgeon" present us with a critique on the addresses delivered to the Medical students of London, on that anniversary sacred to the slaughter of pheasants, and to the opening of the Medical Schools. He looks upon these addresses as a sort of professional manifesto to the world; showing both what we are doing within our own borders, and how we are behaving towards society at large.

"One gentleman," he says, "representing one of the largest Schools and Hospitals in London, after alluding to the subjects most requiring the attention of students, exhorted them to display resolution, energy, and perseverance in the discharge of their duties, and dilated on the importance of hard work as the surest path to success. He further congratulated his hearers on entering a Profession in which they might find 'unbounded scope for the exercise of the noblest faculties of their nature.'

"On the mind of another speaker, the sorrows of coroners, and their limited and restricted jurisdiction, especially as regards procuring Medical testimony, seem to have weighed so heavily, that he could think of no more worthy topic with which to occupy the attention of his audience on such an occasion; and accordingly this subject furnishes the main burden of his oration, combined with a few remarks on Medical Reform, and the 'great need of caution in the adoption of novel propositions in Medicine.'

"A third, avoiding the solution of that difficult problem, 'Who is a Doctor?' devoted his energies, and we think more usefully, to pointing out how students might obtain sound knowledge, how acquire professional repute and secure success, and so satisfy the expectations their friends had formed; and invited them to 'pursue their purpose with a fine sense of what was due from them as gentlemen and members of a liberal profession.'

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"With another, the merits a recently deceased Physician, of great eminence, formed the solitary theme of his discourse, a piece of narrow-minded adulation as misplaced as the epithets might be well deserved. To a fifth, it appeared that 'humanity was the foundation of the Profession;' that 'the distinguishing pride and characteristic of Medicine was, in our own day, that, while retaining all that it had derived from age and experience, the Profession had now allied itself with Science to a far greater extent than could be said of any other calling; that Medicine was not national, but cosmopolitan in its scope.' The exultations of this gentleman, however, alternate with regrets; his ecstacies are too intense to be sustained throughout a whole hour, and he sinks at times to despondency. . . . . He remarks, with an audible sigh, that 'though the Archbishop of Canterbury and the Lord Chancellor take precedence as the highest personages in the realm, the President of the College of Physicians is, on the contrary, a private person!' And again, 'that it is only since 1858 that Medicine has been engrafted on the State.' Such sentiments are little worthy of one 'emphatically the student of science.'"

The surgical critic then goes on to denounce the notion that a great Profession like ours, should resort to "long, tedious, and oft-renewed solicitation of the aid of the State to regulate its internal affairs;" and still more that such a Profession should demean itself so much as to ask *protection*; forgetting, by the way, that it is not ourselves who require protection, but the poor and ignorant. He then proceeds to quote Dr. Wilks:—

"'We have now got our protection, we have obtained our registration at last; but as for any value it may be to the Profession, I for one value it at a straw. This fact was first discovered by those who were most clamorous for legislative interference, and so now we have private societies to protect us—and much good may they do us. For my own part, I would not give one farthing for the purpose of prosecuting illegal practitioners in my neighbourhood; but I would give something handsome, could I chastise some of the legally-qualified quacks. The Profession is not injured by Morrison or Holloway, but by those ten thousand worse charlatans who, under the sanction of the law, are eating away our very vitals. It is not that which enters in, but that which comes out, which defiles. Let us look to ourselves; the disease is an internal one, let us probe the wound to the bottom, and lay it open if necessary.'"

The speciality system next comes under his lash. Again quoting from Dr. Wilks:—

"'The specialist, I say, is generally working for money alone; and if so, his is a trade, and not a profession. It is said that he gains experience in a particular affection, and, admitting that this may sometimes be the case, I maintain that the body is so fearfully and wonderfully made, the organs and functions so interwoven, that it is impossible to treat one organ alone, and I much doubt the fact if any good has accrued to our art, or even to the science of our Profession, by any such divided method of study; that much mischief has resulted and daily results I am constantly a witness, and the blunders committed by these men of one idea, or specialists as they are called, are too numerous to mention. The patient becomes the real diagnoser of his own case, and selects the proper Doctor for his supposed malady; but woe to him if he choose the wrong one, for a peculiar knowledge of one disorder implies necessarily, methinks, an equivalent ignorance of others.'"

After that, he comments on the system of uniting trade to a profession,—a system the abuse of which should, no doubt, be guarded against, but which as it existed in past days was a necessity. Speaking of the General Practitioners, he says:—

"The chilling influence of their present habits and practice is evident enough in the decreasing number of the educated classes who seek admission into the Profession, and the very slight estimation in which they are held in general. Here and there a man of better education or peculiar ability steps forward and claims his place among the first, but the character of the great bulk of the General Practitioners is at a very low ebb."

We have quoted thus largely from this pamphlet, because whilst, on the one hand, we desire to lay bare the various weak points which may exist in our knowledge, habits, and practices, in order that they may be corrected,—so we protest against the sneering tone too often adopted by men who, like our "Surgeon," are evidently dissatisfied with their own Profession. No man is responsible for the faults of his grandfather, and modern Practitioners are not to be condemned because the practice of the old Apothecaries was based upon the keeping a druggist's shop. They are, on the contrary, to be commended for having risen with the requirements of society. Perhaps the "Surgeon" is not aware that complaints are heard of the "decreasing number of the educated classes who are seeking admission into the *Clerical* profession," as well as the Medical; but we should like proofs of either assertion.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

EXCERPTA MINORA.

On the Application of Solution of Chloride of Lime to Ulcerated Surfaces.—M. Hervieux, as the result of observations in a wide field of practice, strongly recommends the suppression of suppuration in serious wounds, by means of the constant application of sponge which has been dipped in a solution of chloride of lime, in the proportion of one part to six or ten of water, according to the case. The sponge should be re-moistened several times a day. He thus concludes:—1. The permanent application of a sponge imbibed in chlorined water to the surface of severe wounds, transforms them into fresh, vermilion-coloured wounds, exempt from fungosities, and from all traces of suppuration. 2. It favours the cicatricial process, which is never more regular, solid, and satisfactory, as when suppuration is completely absent. 3. Among all the disinfectants which have been employed as dressings for suppurating wounds, none is so efficacious as the sponge imbibed with chlorine, since it suppresses the source of fetidity, viz., suppuration and its products. 4. With the exception of cases in which ulcers are kept up by affection of bone, this application gives rise to no erythema or other irritation of the surrounding surfaces. 5. It is in the treatment of phagadænic gangrene, eschars following bad fever, eczematous or scrofulous ulcers, unconnected with diseased bone, Hospital gangrene, laceration of the perineum, and, in general, in all suppurating wounds of a bad character, that this procedure will be found of pre-eminent utility.—*Union Méd.*, 1860, Nos. 127-8-9.

Funis of Large Size.—Mr. Wakefield relates a case of twins in which the children were of very large size, one weighing 9 lbs. 1 oz., and the other 8¼ lbs.—the two together 17 lbs. 5 oz. The mother and children did well.—*Boston Journal*, Vol. lxiii. p. 166.

Albuminuric Amaurosis.—M. Roche, as the result of the examination of the cases hitherto published, and of fifteen others which have occurred to himself, arrives at the following conclusions:—1. Albuminuric amaurosis has a distinct signification in the prognosis of the principal affection. 2. It is usually absent in slight cases of albuminuria. It is generally present in well characterised cases, and is accompanied by serious symptoms, such as general and persistent œdema, eclampsia, and in cases of the affection which pursue a chronic course, and terminate fatally. 5. It is probably of more frequent occurrence than is eclampsia in fatal cases.—*Moniteur des Sciences Méd.*, 1860, No. 117.

Syrup of Santonine.—Santonine having become of late of such frequent employment as a vermifuge for children, M. Laforgue has contrived the following syrup for its more convenient administration:—Santonine, 4 parts; simple syrup, 500 parts. Dissolve the santonine in a small quantity of alcohol, and add the solution to the boiling syrup.—*Gazette des Hôp.*, No. 53.

Poisoning by Castor-oil Seeds.—A hussar, aged 32, of robust constitution, on duty with his regiment near Sétif, in Algeria, desiring a purge, swallowed, without chewing them, three fresh castor-oil seeds, the woody husks of which had been removed. This occurred at six in the morning, and he performed his usual duties until three o'clock, when he became seized with violent colics and yellowish-green vomiting. For some reason, which is not explained, he was not brought under the author's notice until nearly twenty-four hours

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after this, evidently in a desperate state. His sufferings were exceedingly severe, and no means taken to revive his exhausted powers had any success. He died forty-six hours after swallowing the seeds. At the autopsy the mucous membrane of the stomach was found somewhat reddened and softened; but throughout the whole intestinal track, from the duodenum to the rectum, there was found an effusion of blackish blood lining the entire intestinal cavity. On scraping away this coagulated blood the mucous membrane was everywhere very red, and in places quite blackish, resembling skin to which caustic had been applied. The submucous cellular tissue was in some places thickened and indurated, and in others softened and infiltrated with blood. No ulceration or loss of substance was discoverable. There seems to have been no doubt that they were really castor-oil seeds which were swallowed, and that these were only three in number.—*Recueil de Mem. de Méd. Mil.*, Vol. iii. p. 390.

Dislocation of Both Shoulders During a Dream.—A German, aged 43, falling asleep on a settee after eating *sauer-kraut*, was attacked with nightmare, and imagining himself falling from a great height, suddenly threw out his arms to seize something above him. This motion awoke him, and according to his own account, he found his shoulders painful and stiff. As he thought his ailment was only cold, he sought for advice only on the sixth day, when he came to the Hospital, presenting, as he carried his arms widely apart from his body, a very grotesque appearance. The various signs of dislocation downwards were well marked; and as the muscles were firmly set, etherisation was resorted to, when the bones were easily replaced.—*Boston Journal*, Vol. lxiii., p. 167.

Tracheotomy in Croup.—Dr. Fock states that there have been altogether forty-three instances of tracheotomy in croup performed by various Practitioners in Magdeburg; and of these forty-three, eighteen have proved successful, twenty-five of the patients dying. Thus the amount of success is 41·8 per cent., while Trousseau states it to be at Paris but 27 per cent. Of these cases sixteen occurred in Dr. Fock's own practice, eight of the patients recovering and eight dying.—*Deutsche Klinik*, No. 14.

FOREIGN CORRESPONDENCE.

BAVARIA.

Wuerzburg, May 5.

THE MEDICAL FACULTY.

With the beginning of this month the lectures at our University for the summer session have commenced. As usual, the Medical students greatly preponderate over all others, and most of them are again non-Bavarians, who are induced to come here by the old established fame of our Medical Faculty, and which has of late years gained fresh laurels. Although we lost, some time ago, M. Virchow, who is now at Berlin, we still boast of the names of Professors Kölliker for Anatomy and Physiology, Müller for Comparative Anatomy, Bamberger for Clinical Medicine, Linhart for Clinical Surgery, Scanzoni for Midwifery, Förster for Pathological anatomy, and Scherer for chemistry. Within the last few days we have lost one of the younger and exceedingly promising members of the Faculty, Dr. Biermer, who is well known by his valuable monographs on sputa and bronchiectasis, and for his contributions to *Canstatt's Jahresbericht*. This gentleman has received a very flattering call to fill the chair of Clinical Medicine at the University of Berne. On Saturday last the Physico-Medical Society of this place gave him a farewell dinner, at which the universal regret felt at the departure of one of the most active members of the Society was expressed.

PROFESSOR SCANZONI ON DECAPITATION AND INSTRUMENTS FOR DECAPITATION.

The subject of mutilation of the fœtus in utero, which, as I see from your journal, has of late also occupied the attention of the Obstetrical Society of London, was recently made the subject of an interesting communication of Professor Scanzoni to the Physico-Medical Society. It is certainly a great merit that the modern Obstetric Physicians have done all in their power to suppress, as far as possible, the mutilation of the fœtus, which was so frequently practised in former times. By these efforts operative midwifery has entered a new phase, which is not only more in consonance with the more enlightened views of the present day, but also of the greatest benefit to parturient women. The cases in which Obstetric Physicians believe themselves compelled to resort to embryulcia and decapitation are becoming rarer every day. Many Physicians who have seen thousands of cases have never been forced to resort to such an extremity; and yet it cannot be doubted, that there will always be a few cases in which, in spite of the strong disinclination of the Practitioner to such operative proceedings, and even when using all the means at our disposal in consequence of the modern development of midwifery, no other way of saving the life of the mother exists than the mutilation of the child and the gradual extraction of parts of its body. Scanzoni considers these to be such cases in which we have to do with transverse presentations, when no Medical aid has been rendered at the right moment, so that, in spite of internal remedies, of the administration of chloroform, and the adoption of a lateral or knee-elbows-position, turning upon the foot becomes impossible. In such cases we have, unless we choose to await the process of spontaneous expulsion, which is very doubtful, and even when it takes place is always connected with great danger to the mother, only the alternative of either performing decapitation or embryulcia; that is, the opening of the cavities of the chest and the abdomen, and extraction of the viscera, in order thus to diminish the size of the trunk of the child and to pave the way for the hand in the cavity of the uterus, in order to perform turning.

M. Scanzoni, who has never been called upon to do either of these operations, prefers, generally speaking, decapitation, with the exception of such cases in which the peculiar position of the child renders the neck absolutely inaccessible to the instruments—cases which, on the whole, must be exceedingly rare, as it is the rule that in neglected or badly treated transverse presentations the presenting shoulder of the child is deeply pressed into the pelvis, and the neck is so close to the inlet of the pelvis that it is possible to put a blunt hook over it, and, by a powerful traction with the instrument, to bring it down, so that it becomes accessible to the cutting instruments which are afterwards to be employed. If such, however, is the case, decapitation is evidently preferable to embryulcia, and for the following reasons:—

In the first place, the danger to the mother is far less, if merely the neck of the child is severed, than if embryulcia is performed, and instruments, in the form of knives and scissors, are repeatedly introduced. Besides, we can never be certain that the sharp edges of the ribs, after they have been cut through, will be so covered by the integuments that they may not, if the body is afterwards extracted, penetrate into the soft parts of the pelvis of the mother, and thus produce new dangers by one or more wounds; while, after decapitation, the neck presents a perfectly smooth surface. It is also to be considered that, after embryulcia has been done, turning on the foot must still be performed,—an operation which, if the uterus is firmly contracted, is in itself most dangerous, even when, by the diminution of the size of the trunk, the way has been paved to the feet. If, on the contrary, decapitation is done, the evolution of the trunk by one or both arms, which generally hang down into the pelvis, cannot be connected with dangers or difficulties. With regard to the plan of not only opening the cavities, but also severing the vertebral column, so that the child is divided into two parts, such a manœuvre is certainly a great deal more troublesome and dangerous, besides being connected with loss of time, than severing the neck.

One point only seems to be in favour of embryulcia, and that is, that after decapitation and extraction of the trunk have been successfully performed, the extraction of the severed head, which remains in the cavity of the womb, may still be difficult. But if we consider that we now possess in the cephalotribe an instrument, which has repeatedly been used with the greatest success for the extraction of the head after this had been cut or torn off, so that there is no longer any necessity for using the pointed hooks which were formerly so much employed, and which often produced wounds of the uterus, the last objection for preferring embryulcia to decapitation falls to the ground.

The reason why there are still many experienced Obstetric Physicians who are not decided for preferring decapitation, may be, that this operation, as it has been practised until now, is

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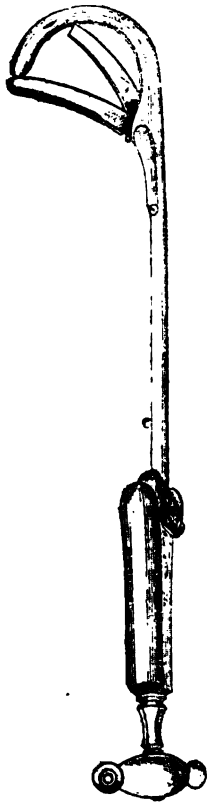
always connected with so many inconveniences, that it still belongs to the most difficult and dangerous operations in the whole range of midwifery. A sharp, blunt-pointed hook was usually employed for this purpose. This was conducted over the neck of the child, and severed it by gradual traction. Even the introduction of this instrument into the vagina and the uterus was connected with evident dangers, which increased while the neck was being severed, as in this stage of the operation an entire command of the instrument was not certain, and it sometimes happened that the edge, after having cut through the vertebral column, suddenly penetrated the other soft parts, and thus not only wounded the soft parts of the mother but also the hand of the operator then in the vagina. This accident was sought to be avoided by employing a strong pair of scissors bluntly pointed and with a long stem, instead of the sharp crotchet. But even this proceding did not entirely answer the purpose, partly because scissors with a very long stem are not easily manipulated, and the vertebral column could only with difficulty be penetrated by them, and partly because the neck, even when lying quite near the inlet of the pelvis, was not always immediately above it, so that, before it was possible to use the scissors, it was necessary first to bring the neck down to the inlet of the pelvis by means of a blunt hook, and to fix it there; and in that case the scissors could not be used, as there was no room for the employment of both instruments. The consideration of these inconveniences of the methods in use, led M. Charles Braun, Professor of Midwifery at the University of Vienna, to the idea of performing decapitation without any cutting-instruments; and he invented for this purpose his so-called key-hook, an instrument which has several times been used with advantage, but is still open to the objection that, in the moment of the hook being turned round its axis, the head of the child is forcibly pressed forwards, and the upper part of the chest pressed downwards, or inversely. If this be done, as may easily be seen in operating on a model, it must be confessed that the head being pressed with a certain degree of force against a portion of the parietes of the uterus, may easily effect a rupture or at least a contusion of the latter, which is also by no means devoid of danger. A rupture is so much the more likely to occur in cases of this kind, as decapitation is only resorted to when the uterus is firmly contracted, and turning is therefore impossible. Considering these circumstances, Scanzoni has invented an instrument which should avoid the dangers inherent to the contrivances hitherto used, while it should, at the same time, easily and safely effect the severance of the neck of the child.



This instrument, which he calls Auchenister, is of the shape of a blunt hook furnished with a handle. It measures 14 inches from one end to the other, and consists of four parts: of the real hook, the sheath of the knife, the contrivance for putting the knife into motion, and the handle.

1. The *hook* has a length of 12 inches, and is so constructed, that its curvature measures about 6½ inches. A groove runs from the point of the hook to the lower end of the pole; on the concave side of the curvature this groove is narrower, but it widens on that part of the pole, which is opposite to the point of the hook, to 3 lines. It preserves this width along the course of the pole, and becomes 4½ lines wide at the lowest part of it, which is 4 inches long. Along its whole length it is 3 lines deep, and has a slightly rounded bottom. Opposite to the point of the hook, the edges of the groove rise, so that the pole is in this part 7 lines thick. In the middle of this thicker part, which is destined for the reception of the sheath of the knife, there is a hole furnished with a screw. One inch below this hole there is a moveable plate, which serves to cover the screw, which is pushed into the hole. At a distance of 2 inches 9 lines from the end of the pole, there is a little prominence for fixing the pole in the handle, and two similar prominences are on the plate which closes the pole, and which has a groove 5 lines deep and 3 lines broad for the reception of the contrivance for putting the knife into motion.

2. The *sheath* which incloses the knife, consists of two blades, is 2 inches long, 4 lines broad, and 2¾ lines thick; it is slightly curved and closed at that end, which is turned towards the point of the hook, while the other end, which has the form of a segment of a circle is open, receives the base of the knife, and possesses five teeth, which correspond to the five incisions on the driving pole. The *blade of the knife*, the form of which corresponds to the sheath just described, is 1 inch 8 lines long, 4 lines broad, and has at that end where it is joined into the pole of the hook, a segment of a circle furnished with seven teeth, corresponding to the smaller deepenings on the driving pole, which will now be described.

3. *The contrivance for moving the knife* consists of a pole 9 inches 9 lines long, which is slightly rounded on three sides, and on the fourth side plain, and which fits into the groove of the pole of the hook. Its upper end is for about 6 lines rather pointed, and has there three transverse prominences, which are a little more than 1 line long, and in the grooves of which the teeth of the knife fit. Two lines below the last little prominence, there are five larger ones, which occupy the whole breadth of the pole, and in the recesses of which the teeth of the sheath of the knife, and partly those of the knife itself, fit: 1½ lines below the last prominence, the pole shows a transverse incision, which corresponds to a similar incision on the pole of the hook, and is meant to show, how high the driving-pole is to be pushed into the groove at the moment when the sheath and the knife are joined to the part to which they belong. Three inches 9 lines from this transverse incision, on the flat side of the driving-pole, there is a somewhat prominent knob, which is meant to prevent the pole, when put in motion, from gliding back more deeply than is necessary for the complete severance of the neck. At the lowest end of the driving-pole, at a right angle, there is a prominent ring 3 lines broad, 1½ lines thick, which has at its anterior surface windings of a screw 1 line wide, to receive the screw, which puts the pole, the sheath, and the knife in motion. The screw itself has a transverse handle of wood.

4. The *handle of the hook*, which is likewise made of wood, is 3½ inches long, 1 inch broad, and 7 lines thick. At the upper end of its border there are prominences; and a groove runs along it for receiving the pole of the hook and the driving pole, both of which are fixed in their position by a moveable metal plate laid transversly across the groove.

In using the Auchenister, it is of the greatest importance to lay the curvature of the hook in such a way over the neck of the child that the point is perfectly free and is under the control of the hand which conducts the instrument. When this is done, a strong traction downwards is made by the hand holding the handle, in order to bring the neck as much as possible towards the middle of the inlet of the pelvis; and now, while the hand in the pelvis fixes the instrument, and draws it as much as possible and without interruption downwards, the screw is put in motion. This draws the driving pole gradually downwards towards the handle, so that at last the greater prominences of it come between the teeth of the sheath of the knife and the blade, and move these parts in such a manner that their free point approaches the point of the hook. When the two points meet, a careful examination must be made, whether the neck is caught by the curvature of the hook and the sheath of the knife; and if this be the case, the turning of the screw is continued. This, again, draws the driving pole downwards, which causes the smaller prominences on it only to close in the grooves which are between the teeth of the blade, by means of which, the sheath remaining fixed, the blade is so moved that its edge continues to penetrate the neck of the child, and at last cuts it quite through. The point of the blade is then received by the furrow which is at the concave side of the curvature of the hook, so that it is quite impossible to wound the soft parts of the mother. I will not omit to remark, that the neck of

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the child is completely severed as soon as the prominence, in the form of a knob, on the driving pole, has arrived at the upper edge of the wooden handle, by which, of course, every further movement of the knife is rendered impossible. The whole instrument is at last firmly pulled downwards, so that its upper part passes between the head and the trunk, after which the decapitation may be considered finished.

Until now this instrument has not been used here in parturient women, but only on the occasion of operations made on the model, and on dead bodies of children; but it was easy to convince oneself in these instances of the security and safety of the operation. Besides we have heard that it has twice been successfully employed on a patient by Professor Walter, of Dorpat.

GERMANY.

Göttingen, May 6, 1861.

I think I cannot write a letter on any subject more likely to interest your readers than on the views lately brought forward by our great Military Surgeon, Stromeyer, as to the pathology of granular conjunctiva. It is by no means my intention to enter fully upon the debatable question of military ophthalmia. I believe that the great discrepancy of opinion still existing on this point is due to the fact that various forms of ophthalmia may, under favouring circumstances, become both epidemic and contagious, and a careful description of the exact nature of the conjunctival lesions, particularly with regard to their order of succession, should figure in the reports of such epidemic, if conclusions as to their causation, pathology and treatment are to be ventured upon. Thus, all forms of blennorrhagic and purulent ophthalmia, whatever their origin may be, furnish a secretion which is contagious, and if unfavourable sanitary arrangements obtain, may give rise to a propagation of the disease; or the affection may become epidemic by a number of predisposed individuals being simultaneously or successively exposed to the same morbific influence. We need scarcely add, that all these inflammatory affections of the conjunctiva may give rise to the formation of granulations as a sequence, these granulations being either hyperplasiæ of the papillæ, or due to a generally increased growth of the connective-tissue element of the palpebral lining.

The true granular ophthalmia of armies is, however, both in its causation and the order of its phenomena, a widely different form of disease. Catarrhal and certain forms of purulent ophthalmia to which we have referred, are excited by atmospheric influences, or by casual irritants. Here a specific miasmatic origin must be assumed. Although a purely local lesion, it is assimilated to the group of typhous form by the conditions under which it thrives. The specificity of its nature is further revealed by the constant, well-defined sequence of its pathological phenomena, the most important of which are the so-called vesicular granulations of the conjunctiva, appearing as a primary lesion, and constituting the first-born products of the morbific agency. We are glad to find that, in addition to the irresistible evidence brought forward with regard to this question at the Congress of Brussels, an observer like Stromeyer has put the stamp of his authority upon the fact, that this disease, to use his own words, does not commence "as was formerly believed, and as many Surgeons who are not familiar with its causes still fancy, with an inflammatory process, as the sequela of which the granulations are to be regarded; but that the latter constitute a primary affection, upon which inflammatory processes, to which they eminently predispose, may become engrafted."

We need not point out to what extent our prophylactic measures will be influenced by this assertion. These primary, so-called vesicular granulations of which we now have a typical case before us, are small, roundish, semi-transparent, sago-grain like bodies, imbedded in the conjunctiva, just beneath the epithelial layer, and disposed in rows or groups; or scattered sparsely over its surface, both in the tarsal or retro-tarsal portion of the palpebral lining. Innocuous as these lesions may appear, the secretion furnished by conjunctivæ affected with them seems to be decidedly contagious; and acute or sub-acute attacks of inflammation, which, in eyes affected with these granulations, comparatively trifling causes serve to excite, lead to rapidly progressing metamorphoses in their structure from which most serious and obstinate morbid changes of the conjunctiva result.

Stromeyer agrees with most observers in stating that the introduction of a few individuals affected with granulations into an over-crowded, ill-ventilated barrack-room will give rise to a spread of the disease. Granting this to be true, it will often, nevertheless, be exceedingly difficult to furnish absolute proof of the disease always emanating from foci of contagion introduced into a crowded community. Specific contagia are made light of in our hygienic age, and we should always be met by the objection that the unsanitary conditions which are indispensable for the spread of the poison can with equal right be regarded as the source of its development. On the other hand, those who maintain its spontaneous generation, must bear in mind Stromeyer's assertion that the vesicular granulations may be so small that a microscopic examination would be necessary to determine their absence. Who could therefore venture to assert that in a given outbreak of the disease, no individuals affected with granulations had been present in the community? Those who deny the ætiological sufficiency of un-hygienic influences, might derive a valuable support for their argument from the evidence adduced by Bendz, of Copenhagen (See Comptes-Rendus of the Brussels Congress), relative to the first appearance of the disease in the Danish army, where it was quite unknown prior to 1851. It appears that the army of the Duchies and the federal troops in Schleswig-Holstein suffered considerably from this form of granular ophthalmia. It was first imported into Copenhagen by prisoners of war. After the conclusion of peace the Danes recruited again in Schleswig, and numbers of men affected with granulations, who had belonged to the disbanded armies of the Duchies were received into their ranks.

Ophthalmia appeared first in the regiments into which these recruits were admitted. Subsequently the removal of the troops which had been stationed and recruited in Schleswig, where the disease had become endemic, to Copenhagen, gave rise to an alarming dissemination of ophthalmia, and even the civil population of Denmark became affected to such an extent, through the medium of discharged soldiers, that, in 1856, 320 out of 2600 recruits were found, on first examination, to suffer from granulations. If we read the very naïve accounts of the gregarious habits of ablution prevailing among Danish soldiers, we are not surprised at the rapid spread of the disease, after it was once introduced. But as these habits, associated with a general neglect of hygiene in other matters, no doubt existed to an equal extent previously, without producing this form of ophthalmia, we may be fairly justified in seeking its ætiology in the imported foci of contagion. Had the sanitary arrangements of the Danes been more perfect, the propagation of the disease undoubtedly would have been prevented; and if the importance of segregating those affected with vesicular granulations, and the inadvisability of receiving recruits affected with granulations into healthy corps had been understood, the epidemic might altogether have been averted.

On the other hand, it might be said that the altered circumstances in which the Danish troops were placed by war, the atmospheric contamination resulting from the faulty hygiene of camp and fort and other buildings temporarily occupied and overcrowded, would be sufficient to account for the origin of the disease *de novo*. This statement would, however, be at variance with facts, the correctness of which we have no reason to doubt; and no *à priori* arguments can invalidate the data which figure in the elaborate report of the Danish Surgeons. Do not fear that I am going to lead you back to the early history of this disease; but allow me to introduce, for a moment, no less a person than the late Emperor Nicholas upon the scene of discussion. Addressing Dr. Kabath, when that officer was in charge of the Eye Hospital at Sebastopol, when the disease was epidemic in 1837, the Emperor remarks, "This scourge, in my opinion, is worse than the plague itself; and do you know to whom we owe it? To Michael Sémonovitch, Count Woronzoff," said he, pointing to that nobleman, who was present; "he brought this disease to us from France. I left a part of the army which returned with him with my brother Constantine; a second portion was sent to the Crimea, and a third to Cronstadt, and since that time the evil has spread over the greater part of my armies" (the Emperor concluded by some excellent remarks on the best means of

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exercising a careful *surveillance* over chronic cases, till all chance of a relapse and danger of infection had ceased).

Now, the mortality of the Russian army is, according to the latest statistics, 39 per 1000 per annum; and is not likely to have been below that mark before 1816, when ophthalmia was first introduced by the troops returning from France, where they had contracted the disease from the other European armies. The great mortality of armies is, however, proved to be due to zymotic diseases; if ophthalmia could, therefore, arise *de novo* from unsanitary influences alone, there is little doubt, if we regard the exceedingly high rate of mortality, that the circumstances in which the Russian soldiers lived would have sufficed to give birth to the disease prior to the introduction of the contagion. However this may be, it is satisfactory to know that the causes which some believe capable of creating the disease are assumed by all to be indispensable for its spread. Here, fortunately for all practical purposes, no difference of opinion obtains. In this age, however, when sanitary science is taking such high ground, it is well to bear in mind that till we can trust in the infallibility of our sanitary arrangements, we cannot afford to despise those isolating measures which are indicated in all forms of communicable disease. Let us therefore not only improve our ventilation, increase our water-supply, and facilitate means of ablution, if we find vesicular granulations prevailing, but let us carefully separate and treat those affected with them, remembering that they are not only dangerous for the community, but dangerous to the individual who carries the germs of purulent ophthalmia in his lids. In countries where other causes productive of ocular disease prevail, the danger of this fearful complication is of course increased, and a still more strict attention to these predisposing morbid lesions required.

Now, although the true pathological import of the vesicular granulations, to which Müller and Eble had directed attention many years ago, was fully re-established at the Brussels Congress of 1857, no unanimous opinion was arrived at with regard to the histological changes to which they are to be ascribed. The most plausible explanation offered at the Congress was that of Bendz, of Copenhagen, who believed them due to a hyperplastic condition of the minute closed follicles of the conjunctival membrane. This was, as far as we are aware, the first occasion on which the existence of closed follicles as normal elements of the conjunctiva were referred to. Glands, simple or bilobed, or acinose in structure, with ducts leading to the free surfaces of the conjunctiva, and situated in the greatest number in the retro-tarsal fold of the upper lid had been described long ago by Krause, sen., and his son furnished in 1854 most exhaustive details in illustration of their minute structure. Subsequently, Manz discovered in the pig small open follicles in the ocular conjunctiva, and glands exactly identical in nature were found by Stromeyer in the human eye, particularly close to the extreme margin of the cornea, a favourite spot for the formation of phyctenulæ in a well-known form of conjunctival disease, but the existence of closed follicles still remained open to doubt.

It is obvious that the importance of vesicular granulations would be increased if it could be proved that they were not merely due to an enlargement of pre-existing physiological organs.

Stromeyer was the first to urge against the acceptance of Bendz's views the grave objection that his examinations were made at a period when ophthalmia was epidemic at Copenhagen, and that the conjunctivæ used for the investigations were taken from soldiers who had been exposed to the exciting influences of the disease in which the formation of these follicular bodies constitute such an important and constant lesion. The results could, therefore, not be considered as decisive. In order to contribute towards the solution of this question, Stromeyer examined 1000 eyes of wild and domestic animals, particularly of pigs. In the latter the conjunctivæ were frequently found to be affected with changes accurately identical with those known as vesicular granulations of the human conjunctiva. In other cases, however, even the most careful microscopic examination failed to trace the existence of closed follicular structures; and on further investigation, the practically interesting fact was elicited, that the diseased eyes were nearly constant in those parts of Hanover where hygiene of the pig-stye was still unknown, where the animals wallowed all day long on dirty litters, exposed to the emanations from their own excrements, but of most exceptional occurrence where the breeding of pigs flourished under scrupulous attention to cleanliness and other sanitary requirements. This also agrees with vesicular granulations in the human eye as being most frequent in the warm months, at a time when all miasmatic influences are most developed. Vesicular granulations must therefore be regarded as new formations.

Stromeyer describes them as formed by a stroma of delicate connective tissue, containing some serum in its meshes and a quantity of lymphoid cells, the whole surrounded by a layer of rather condensed areolar tissue. In the first pig's eyes which we procured for our own investigation we were fortunate to find the conjunctiva studded with most exquisite sago grain-like bodies: they were situated just below the epithelial layer. A careful examination particularly of re-softened sections of the dried membrane leads us to agree perfectly with Stromeyer's description. The absence of a distinct membranous investment was very clearly made out, and was particularly evident in specimens, when sections of Krause's glands presented themselves simultaneously with three of the vesicular formations. We can add that these granulations are distinctly traceable to a hyperplastic condition of the connective tissue cells of the conjunctiva,—a membrane rich in beautiful networks of plasmatic cells, and thus eminently adapted for proliferation and rapid formation of organised growths.

Distinct enlargement of the cells, with division of nuclei, becomes gradually more marked towards a stratified layer of larger fusiform cells in a state of active nuclear change. These signs of proliferation in the marginal cells were only present where the growth of the granulation seemed to be progressing. These fusiform cells surrounded an aggregation of round nucleated cells, like lymph-corpuscles, and within the ovoid main area sub-divisions were formed by bands of stroma encircling secondary cell-filled crypts.

The whole is, therefore, simply increased cell-growth, within the meshes of the conjunctiva tissues, and, as Stromeyer also remarks, can be fairly analogised with the growth of tubercles, according to Virchow's views. Indeed, a vesicular granulation could not be distinguished histologically from a newly-formed gray tubercular node. Its subsequent fate is, however, widely different.

It might also be easy, from an histological point of view, to analogise these growths to all the so-called "conglobate glands," as Henle has done in a most elaborate article. Without committing ourselves to a definite opinion on such a difficult question as the new-formation of gland substance in disease, it will not be quite devoid of practical importance to compare vesicular granulations with the enlarged closed follicles constituting the sago-grain appearance of the ilium in cholera and typhoid fever. These formations are, to a certain extent, in a similar position with regard to their pathological import; it being difficult to say when they commence to constitute a morbid change. There can be little doubt that a great number of these so-called follicles are, in reality, new formations, as they appear in much larger numbers in these cases of disease than would correspond to the frequency of the normal glands in this situation. They represent isolated, conglobate dépôts of cell-formation, within the meshes of the connective tissue, just as in the same disease we see an extension of the so-called "typhoid exudation" beyond the limits of the Peyerian patches; *i. e.*, a proliferation of the connective tissue corpuscles giving rise to elements similar to those resulting from multiplication of the intra-follicular gland-cells. Granular conjunctivæ and typhous fevers seem to thrive under similar conditions; and quite apart from all anatomical speculations, the more easily appreciable conjunctival lesion might serve as a valuable indicator of insalubrious agencies being at work long before they had acquired sufficient vigour to produce more dangerous constitutional disturbances.

The analogy might be extended still further by pointing to the well-known facts regarding the quiescence or latency of the typhoid deposit, and its gradual elimination by absorption or disintegration, without passing into the ulcerative stage. Vesicular granulations, as is well known, can remain for months in a quiescent stage. In the absence of a tendency to the induction of ulcerative processes, however, the two deposits go widely asunder, just as a broad line of distinction separates the fate of the vesicular granulations from that of

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the miliary tubercles, with which it presents so many analogies in the earlier stages of its growth.

We repeat again that it is not without practical interest to analogise the products of these diseases in the ætiology of which contaminated air is acknowledged to be a *sine qud non*. The same measures of sanitary reform will crush the whole pestilential brood.

Let us glance for a moment at the ulterior fate of this form of granulation. The steps of their further development to vascularised fibro-plastic new formations, under the influence of inflammatory action, are too obvious to need comment: it is of course connected with atrophy of the round cells, and preponderance of more highly organised structural elements. That the well-known forms of granulation resulting from the advancing organisation of the primary vesicular bodies, may become complicated with or entirely merge into the results of general luxuriation of the conjunctival elements, need hardly be alluded to, except for the purposes of pointing out how difficult or impossible it must be in a given case to decide whether they persisted or not, whether the disease was a case of idiopathic purulent ophthalmia, or whether it was a case of purulent ophthalmia engrafted upon and to a certain extent excited by the presence of vesicular granulations.

Stromeyer's description of the various forms of inflammation complicating vesicular granulations, which in themselves can form and exist for a long time without objective or subjective symptoms of inflammatory action, and his rules of treatment in these cases, are admirable. He also alludes to the well-known fact of the vesicular granulations frequently becoming retrograde, without previous vesicularisation. Increased hyperæmia will, we think, generally precede or attend the process of absorption, and—as Professor Græfe is wont to remark in his clinical lectures—our treatment must aim at imitating Nature's process, *i.e.*, at inducing a moderate hyperæmia in the membrane in which this product is embedded, and in abstaining from interference with such hyperæmic conditions, which are often symptomatic of spontaneous absorption. On the other hand inflammatory symptoms frequently usher in the formation of a fresh crop of gray granulations. Neither of these forms will, however, be mistaken for the active phlegmonoid inflammation, leading to vascularisation and higher organisation of the vesicular growths.

In concluding these remarks, I must protest against regarding all forms of military ophthalmia as due to vesicular granulations, and their sequelæ. This would be erring on the other side. Thus of 564 cases of ophthalmia treated in five years in the Hanoverian army, of which 96 occurred in 1855, when granular ophthalmia appeared together with typhoid fever, 256 only were of the miasmatic form, preceded by, and due to, vesicular granulation; 274, purely catarrhal; 34, phyctenular conjunctivis.

In Belgium, where in 1840, one in every five soldiers was affected with vesicular granulations, and in 1855, under the influence of excellent sanitary measures, the disease was so far exterminated, that only one in every thirty-three was so affected, the number of ophthalmic cases not preceded by vesicular granulations did not diminish in the same proportion, as the following tables, taken from Meyne's Military Statistics, show:—

BELGIAN ARMY.

	Granular Ophthalmia. No. of Cases.		Other forms of Ophthalmia.	Ratio.
1840	5847	(1 in every 5 men)	238	3
1845	9644	(1 in every 6 men)	123	4
1850	8761	(1 in every 9 men)	131	5
1855	880	(1 in every 33 men)	230	7

In Sep. 1857 only 149

Meyne goes so far as to say that three-fourths of the cases of purulent ophthalmia are not preceded by vesicular granulations.

These figures prove, as everybody will have surmised without their aid, that there must be many causes productive of ophthalmia, in the life of the soldier, in addition to the miasmatic influences to which he was at one time, and is still in many places, so much exposed. In a prophylactic point of view, however, the vesicular granulations, of the nature of which I have given a rapid sketch, are the most interesting and important, because they depend upon removable causes.

GENERAL CORRESPONDENCE.

BEEF-FIBRE JUICE.

LETTER FROM MR. J. JARDINE MURRAY.

[To the Editor of the Medical Times and Gazette.

SIR,—At the last meeting of the Obstetrical Society of London, Dr. Druitt exhibited a concentrated extract of beef, and claimed the merit of introducing it as a remedy for intense nervous exhaustion (a). It was stated that the beef-juice differed from beef-tea, and from all other extracts of beef hitherto sold; it was simply the expressed juice of meat-fibre without superadded moisture, and was obtained by subjecting beef to a high temperature. It contained no fat, no fibrin, no albumen, no gelatine. The only difficulty was to preserve it.

But Dr. Druitt has been forestalled in the recognition of the value of this material and in introducing it to the notice of the Profession. In an article published in the *Monthly Journal of Medicine* for January, 1855, Professor Christison strongly recommended this same preparation; and he went a step further than Dr. Druitt, in showing how it may be preserved. I quote his description of the mode of preparing and preserving the beef-juice, as I believe it will require little consideration to convince Medical men that the process is perfect, and that the essence of beef so procured differs from all similar preparations, and surpasses them in excellence:—

"Cylindrical cases of tinned iron are filled each with six pounds and a-half of beef; and the lid is soldered on, but with a hole of about half-an-inch in diameter in the middle of it. Two trays of such cases are shoved into iron retorts, analogous in form to retorts for gas-making, but double-cased, so that steam may be introduced into the interstice around. They are thus subjected to a heat of 220° under steam pressure, for about three hours, by which the beef is partially cooked, and, being thus also made to contract strongly on itself, squeezes out a portion of its juice, amounting to a few ounces from each tin. The tins are then drawn, the juice is poured out, and the meat, with certain additions, is subjected to the preservative process. The juice, after being cooled and entirely freed of fat, is put into small four-ounce tin cases. Each of these has a small aperture at one end, which is secured with solder, after the juice is poured in. The tins are then subjected, on trays, to a temperature of 220° in a muriate of lime bath. On being removed, the solderer rapidly touches with his iron the solder on the top, which giving way allows steam to rush out forcibly and carry with it the air in the upper part of the interior. By the time he has thus swiftly passed over sixteen or twenty tins, the first is ready for being re-soldered by a similar dexterous application of his iron, which then in succession as quickly secures the whole open and steaming apertures. The process of heating in the bath, tapping, and re-soldering, is then repeated a second time, to make sure of the thorough expulsion of every particle of air" (b).

Having been strongly convinced of the great value of the essence of beef so prepared, I have used it extensively in all cases of prostration, from whatever cause; and I cannot doubt that, in several instances which have come under my observation, it has been the means of saving life. Three years ago, when attending a case with Dr. Walshe, I submitted this adjuvant remedy to his notice, and it has since met with his warm approval. The patient was extremely weak and emaciated, but took almost no other nourishment during many days, and subsequently did well. I have administered this nutrient material *per rectum* at intervals of three hours, to a child who afterwards made a very unlooked-for recovery from the most aggravated form of scarlatina, with sloughing throat, profuse acrid discharge from the nostrils, suppuration of the glands of the neck, and low muttering delirium. And, in an instance in which all food was pertinaciously and obstinately refused, I caused the concentrated beef-juice to be sent from the druggist in bottles, to be taken as a medicine at stated intervals.

Of course it is not to be expected that any article of diet which may be ordered to be taken once or several times a-day will long be relished; but certainly this essence makes

(a) See Report in *Medical Times and Gazette*, May 18, p. 536.

(b) This beef-juice is manufactured by Messrs. Gillon and Co., of Leith.

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better, cheaper, and more palatable beef-tea than any which can be procured by boiling. Indeed, a gentleman lately under my care became so fond of it that, on leaving Brighton with the intention of travelling to Italy, he added to his luggage a box of canisters containing beef-juice.

By slow evaporation of sixteen fluid ounces of the liquid, I obtained scarcely one ounce weight of solid extract. This is intensely sapid and not disagreeable, but I very much doubt its being equal in value to the fluid from which it was obtained. I am, &c.

J. Jardine Murray, F.R.C.S.E.

Brighton, May 14.

INDIANS IN THE BRITISH SERVICE.

Letter from Dr. S. J. H. Munro.

[To the Editor of the Medical Times and Gazette.]

Sir,—In your last issue I saw a letter from Professor Syed Abdoollah, relative to employing Indians in the British Service, and I think it deserves a reply.

During greater part of my service in India I held Medical charge of H.M.'s Punjaub Dépôt, which is, perhaps, one of the most important and largest British Military Establishments of the kind abroad, and as I had under my care cases of almost every kind of disease to which soldiers are liable, from causes more or less remote, as well as invalids from length of service from almost every part of India, I have some claim to be heard on the subject.

The temperature at Kurrachee at the time of their arrivals was what would in Europe be considered temperate. Yet, all of the men, but especially those who had been long in the country, and the native servants who accompanied them complained much of the cold, and, I believe, the latter would be almost unable to attend on themselves if the thermometer had but fallen a little more.

As to the question about language. Are not all your readers aware—1. That it is the rule not to appoint a Medical Officer to the charge of a civil station or native regiment until he is acquainted with the language? 2. That even if that rule is ever deviated from there are interpreters attached at all of these appointments? And 3. That in many instances the European becomes much better acquainted with the Hindoostanee than most of the natives ever do?

But even setting all these aside, can any of your readers believe—1. That the Army would be better satisfied, and acquire more talent and energy in a Staff of Indians than they now do in that of European Medical Officers? 2. That the position of Army Medical or Duty Officers would be improved by the change? Or 3. That the comfort of the natives themselves would be improved, when at present, without taking out any Medical or Surgical diploma they can become Apothecaries to regiments, or even obtain Medical charge of some towns?

I admit that every one who goes abroad, either in a public or private Medical capacity, should be previously well acquainted with the climate and the influence it exercises on disease in the locality where he is to practise; but this is, or ought to be, taught in the classes of Military Surgery.

Professor Abdoollah says in his letter that there are many natives of India serving in H.M.'s Regiments there. May I ask him, How many of these are Assistant-Surgeons, and whether or not the few who have got into the service as such feel themselves comfortable?

In fine, Europeans have proved that they can in any part of the world both conquer and keep under subjection a number of Asiatics far greater than themselves, and I consider that no change in any department of our Armies should take place until at least they have proved themselves equal to their hardier brethren. I am, &c.

Wm. S. J. H. Munro, M.D., M.R.C.S. Lond.,
Late of H.M.'s 83rd Regiment, and 93rd Highlanders.

West Hartlepool, Durham, May 14.

NEW REMEDY FOR HOOPING COUGH.

Letter from Mr. Foster.

[To the Editor of the Medical Times and Gazette.]

Sir,—The prevalence of hooping cough at this season, with its attendant mortality, has induced me to call attention to a remedy which I have lately used with much success. It is the common clover hay (*Trifolium in fœno*).

I have used it since last summer in about fifty cases, and found it to fail only in three or four. It cures mostly in a few days, in some cases treatment is prolonged to a week, and in a few to two or three weeks.

While other symptoms have to be met with emetics, aperients, salines, and tonics, its effect in alleviating the spasmodic character of the paroxysms has been very remarkable, so that even if after taking it the cough continues, it is no longer so distressing or exhaustive. I was made acquainted with it in an indirect manner; I believe it came originally from an old fisherman at Hastings.

One has naturally great suspicions about a remedy so purely empirical, but my success with it has been so great, as to cause me to recommend it to my fellow Practitioners in these troublesome cases. Since using it I have begun to disbelieve in "the natural course" of pertussis. I have generally found that it answers best when it acts slightly on the bowels.

The hay should be sweet and leafy. The formulæ are as follows:—The Infusion:—℞ Trifolii in fœno, ʒij.; aquæ bullient., Oj.; macerate for four hours and then strain. For a child of five years, take a table-spoonful three times a-day. The Syrup:—℞ Trifol. in fœn., ʒij.ss.; sacch. cand., ʒij.; aq. bullient., Oj.; macerate the hay in the water for an hour with gentle heat, then boil down to proper consistence. For a child of five years, take two tea-spoonfuls four times a-day.

Mr. Squire has prepared for me a fluid extract, which may be obtained from him. I am, &c.

Huntingdon, May 20. M. Foster, F.R.C.S.

POISONING BY STRYCHNIA—RECOVERY.

Letter from Mr. R. W. Thornton.

[To the Editor of the Medical Times and Gazette.]

Sir,—Having observed in your issue of December 15, 1860, a paper read by Dr. J. Part, I beg to put an additional case on record which tends to bear out that gentleman's views; at least it does not negative them.

Early in 1860, a young lady suffering from mimosis inquieta being on a visit to my family, contrived to get possession of a pocket case of bottles, in one of which was some strychnine (about a drachm), of which she took as near as I can estimate about three or four grains: this occurred before leaving her room to join in family prayers, during which time and until she was in the act of raising a cup of tea to her mouth, there was no appearance of anything being wrong, when suddenly she threw herself back in a spasm. I caught her, and carried her to her room, and in the meantime ordered two raw eggs to be brought in, the whites of which I immediately administered. I then gave her an emetic of sulphate of zinc, but being impatient for its action, I administered a liberal supply of mustard and warm water, the nauseous combination having the desired effect in a very few minutes. Up to this time spasms recurred with about ten or twenty seconds' interval of repose between each. I then tried the inhalation of chloroform, but I do not think with any benefit; as although the spasms gradually became less severe and general, being more persistent in the lower extremities, I believe it was merely a *post hoc* to the chloroform, and *propter hoc* to the full evacuation of the unabsorbed strychnia in the stomach. Whether the mere act of vomiting had (in default of evacuating the stomach) any beneficial effect, I am not prepared to say; merely leaving the case on record that after certain treatment recovery ensued.

The spasms left altogether in about five hours, merely leaving a soreness all over the body. But strange to say the young lady persists in saying that she felt no pain during any of the violent contortions, and was quite sensible to external impressions during the whole time.

She also states that her object in taking the poison was to prove to me that she was not like any other person; she fully believing that the drug would not affect her in the slightest, and that she would then be able to say to me, in proof of her delusion, "that she had taken strychnia and it did not hurt her;" however, the contrary being the case, completely cured her of her delusions and mimosis.

I am, &c.

R. W. Thornton, M.R.C.S. Eng.

Muswell Brook, New South Wales, Feb. 1861.

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REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MAY 14, 1861.

DR. BABINGTON, President, in the Chair.

THE minutes of the previous meeting were read and confirmed in the usual manner; after which the Secretary commenced reading the paper of the evening. He was then interrupted by Dr. O'Connor, who had only just entered the room.

DR. O'CONNOR asked the President if the minutes had been confirmed, as he wished to move a resolution concerning them.

The PRESIDENT answered in the affirmative, and said that it would be impossible for him then to enter into any subject other than the business of the evening.

A paper, by Dr. A. T. H. WATERS, of Liverpool, was communicated by Dr. SHARPEY, entitled,

RESEARCHES ON ASPHYXIA; WITH OBSERVATIONS ON THE EFFECTS PRODUCED BY THE HOT BATH IN ASPHYXIATED ANIMALS, AND ITS USE IN RESTORING SUSPENDED ANIMATION.

Amongst the numerous researches which had been made with reference to asphyxia, the author was not aware that any had been directed to one of the subjects he had investigated. Physiologists are agreed as to the order in which the arrest of the vital actions takes place in asphyxia, but not as to the duration of the heart's action, nor yet as to the best mode of treatment in suspended animation. The different societies, whose aim is to save life, issue rules of the most opposite character for the restoration of those apparently dead. Two important points remain to be decided: first, the period after asphyxia has commenced during which treatment is likely to be successful in restoring animation; and, secondly, the value of the hot bath as a remedial agent. Experiments had been instituted by the author with reference to the following questions:—1. How long does the heart continue to beat in asphyxia? 2. What are the effects of the hot bath on an asphyxiated animal — firstly, after all respiratory movements have ceased, and are not re-excited; secondly, when respiration has been re-excited, and is being feebly carried on? It is difficult to decide with any degree of certainty with regard to the first question. Certain circumstances tend to throw a doubt on the generally received opinion, that "in asphyxia the movements of the heart cease in a few minutes after the cessation of the functions of animal life." The second question is more readily answerable, but the author was not aware that any experiments bearing directly on it had been performed previous to his own. The subjects of experiments were dogs, cats, and rabbits. They were drowned in water varying in temperature from 40° to 50° Fahr., and in one instance 36°. On being removed from the water, after every external symptom of life had disappeared, they were opened by the removal of the anterior part of the chest, so that the movements of the heart could be observed. Some of the experiments were parallel—*i.e.*, two animals of the same age and size were chosen, and after being drowned in the same way, were opened at the same time; the difference being that one animal was, previous to being opened, put into the hot bath at 100°, and the other was left exposed to the atmosphere. The number of animals experimented on, as just mentioned, was 28; of these, two being set aside which were submerged for an hour, in 18 the heart was found beating when first observed; in 8 its action had ceased. The animals were opened at periods from the commencement of asphyxia varying from the fifth up to the thirteenth, and in one instance the twenty-first minute. The average period during which the ventricles continued to contract was nineteen minutes; the longest period was in a rabbit—forty-five minutes. With regard to the first portion of the second question, the morbid appearances of the animals put into the hot bath were compared with those of the animals not so treated. In the animals put into the bath, the lungs were much more congested, more full of blood; they were firmer in substance and specifically heavier than those not so treated. Both sides of the heart were loaded with blood. In some instances the blood was coagulated in the vessels of the lungs, the systemic veins, and the cavities of the heart. The blood was generally less fluid than in the animals not put into the bath, and coagulated more rapidly when removed from the vessels. In no instance did the bath produce a respiratory effort or any movement whatever on the part of the animal; it seemed, further, to shorten the duration of the heart's action. With regard to the second portion of the second question, experiments of the following character were performed:—Animals were drowned in water from 45° to 50° Fahr.; they were kept under water, some for one minute, some for one minute and a-quarter, and one for two minutes. When removed from the water they were placed on the table, exposed to the air. They soon began to breathe feebly. In order to compare the effects of the hot bath with those where all treatment were omitted, some of the animals were left to themselves, others were put into the bath as soon as respiration had been re-excited. Thirteen experiments were performed —twelve on rabbits, one on a cat. Of the thirteen, seven were put into the hot bath; of these, six died, at periods varying from two to twenty hours after submersion. Six animals were left to themselves; of these, four recovered and two died, both between the eighth and twentieth hour after submersion. The animals which had died after being put into the hot bath presented the following morbid appearances. The lungs were dark-coloured, full of blood, firm, almost liver-like in appearance. In some instances, portions sank in water; the air-tubes were empty; there was blood in all the cavities of the heart, in one instance coagulated. In the animals which died after submersion, but which were not put into the hot bath, the lungs were somewhat firm and congested, but to a less extent than in the others. The experiments appear to the author to be sufficient to establish the principle of the injurious influence of the hot bath, both when asphyxia is complete, and when recovery is commencing. In the former case, the bath momentarily increases the circulation; but respiration being in abeyance, the lungs become loaded with blood, and the left side of the heart distended. In the latter case, respiration being imperfect, engorgement of the lungs takes place, and subsequent arrest of the heart's action. The following conclusions are drawn by the author from his experiments:—1. That in asphyxia by submersion, the ventricles of the heart do not, as a rule, cease to contract "in a few minutes after the cessation of the functions of animal life," but that in many instances their action continues for a very considerable period, and that this serves to explain how recovery has taken place after lengthened submersion. 2. That in cases of asphyxia where respiration has altogether stopped, the effects of the hot bath are: to produce an accumulation of blood in the lungs and in the left side of the heart, together with a tendency to coagulate on the part of the blood; that it does not tend to prolong the action of the heart, but rather to paralyse its movements, and diminish the duration of its contractions; that it does not excite respiratory efforts, and prevents artificial respiration being properly carried out. 3. That in cases of asphyxia where respiration has been re-excited and is being feebly carried on, the hot bath, although in some instances it seems to have no immediate bad result, yet has a tendency to produce a fatal issue some hours after its use, by causing extreme congestion of the lungs, together with consolidation and collapse of the pulmonary tissue. The following practical inferences are drawn from the above conclusions:—1st. That efforts to restore animation should be made in all cases where asphyxia has not been of very prolonged duration. 2nd. That the prolonged use of the hot bath in asphyxia is not only inefficacious, but dangerous; and that its temporary use appears to be attended by no direct benefit. So far as any means similar to that of the hot bath are likely to produce respiratory movements, the alternate dashing of hot and cold water on the body is probably the most efficacious. 3rd. That it appears safer practice to omit all artificial treatment, when respiration is going on feebly, than to make use of the hot bath. 4th. That in the treatment of asphyxia all efforts should be primarily directed to restoring, or continuing, the respiratory movements; nnd all measures tending to load the lungs or embarrass the respiration should be avoided. The

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author believes that the best method of performing artificial respiration we are yet acquainted with is that recommended by Dr. Marshall Hall.

The PRESIDENT remarked that the results of experiments on animals, as, for instance, the dog, would not apply to man. In the dog the skin was thick and non-perspiring. He should expect that the same would apply to some other animals. He did not remember whether the skin of the cat was non-perspiring, as was that of the dog.

Dr. WYNN WILLIAMS had seen a cat in a state of profuse perspiration, which had been accidentally kept some time in an oven.

The PRESIDENT remarked on the great importance of deciding on the subject, as two opposite modes of practice were founded on the different views held.

Dr. CHAMBERS remarked that the warm bath was found to be hurtful in the treatment of the asphyxia of cholera, which he considered tended somewhat to confirm the opinions deduced by the Author from his experiments.

Dr. O'CONNOR had found that in the case of children born in a state of asphyxia, sprinkling with cold water was much more beneficial than immersion in the warm bath. He considered that the sprinkling with cold water, and Marshall Hall's method, was much to be preferred to immersion in hot water.

Dr. MARKHAM remarked that it was almost impossible to raise a discussion on the paper, as it was a record of experiments. It was a question of great importance; and if Dr. Waters' views were proved by further experiments, it would be a valuable fact for the Profession in reference to the treatment of suspended animation in persons who had been submerged. One point which he would briefly allude to was, that possibly the warm bath might do harm by preventing the access of air to the skin, and thus assisting the state of asphyxia.

Dr. WYNN WILLIAMS asked if the Author could account for the fact that warm water injected into the veins produced spasm of muscles, as demonstrated by Dr. Richardson?

The AUTHOR stated that of the experiments he had detailed, some were performed about four years ago. The attention of the Profession was at that time directed to the subject by Dr. Marshall Hall. He (the Author) then brought the results of his researches in reference to the hot bath, before the Committee of the Royal Humane Society of Liverpool. This Society had previously adopted the rules of the Royal Humane Society of London. The Committee of the Liverpool Royal Humane Society referred his plan to the Liverpool Medical Society for their opinion. The result was that Dr. Waters' plan was recommended, and it was therefore adopted. Unfortunately no record whatever had been kept of the cases thus treated, so that no practical test of the working of the method was attainable. The attention of the Profession having been again called to the subject by Dr. Christian, in a paper recently read before the Society, he (the Author) had again proceeded with his experiments. There were two points on which he wished chiefly to throw light,—first, the lengthy time the heart continued to beat after submersion for various periods; and second, the effect of the hot bath on animals asphyxiated by submersion. Most physiologists appeared to believe that the heart did not contract during asphyxia. Sir Benjamin Brodie believed that the heart ceased to beat after submersion for five minutes. The experiments of Mr. Erichsen, and those performed by himself, tended to prove that the heart contracted for some time after complete asphyxia,—in some cases after long periods. It was true the heart's action was very feeble; but still it did act a little, and then there was still a prospect of life. Roesler had succeeded in restoring animation in three animals, two rabbits and a cat, after they had been submerged for 5¾, 9¼, and 11¾ minutes, and that, too, when six minutes had elapsed from the time of taking them out of the water to the commencement of the method of restoration; so that it was respectively 11¾, 15¼, and 17¾ minutes after submersion. It was supposed by some that these experiments proved that when the heart had ceased to act it might again be roused, and life be restored. He (the Author) did not think so; but that, if the heart did act, however feebly, it was possible to restore life by exciting respiration. In reference to the hot bath, the results were very striking; and although the experiments were not numerous, they led him to believe that its use was very prejudicial. There was no proof that the hot bath excited any inspiratory effort. He believed that it would be better to strike the body with a towel dipped in cold water, and to admit cold air, etc. The alternate immersion in hot and cold water, as in the case of the child born asphyxiated, would be difficult in the case of an adult; and here he believed that the advantage obtained was from the cold and the shock. There was reason to suppose that cold excited respiration, but none to suppose that heat did. Experiments were wanting to prove the effects of dry heat. He believed they were the same, though not so injurious, as those of the hot bath. The recent experiments of Mr. Hunter appeared to confirm his results. They tended to show that the hot bath was a depressant. It increased the amount of heat in the body, but interfered with the action of the lungs. His (the Author's) views had been remarkably confirmed by the experience of the House-Surgeon who had been for ten years attached to an Hospital near the Docks at Liverpool. He said that, having had many cases of drowning to treat, he had formed a very unfavourable opinion of the hot bath; and he added, that after death, in cases in which this plan had been tried, he had always found the lungs much congested. This evidence was the more valuable, that it was given without any reference to Dr. Waters' experiments. In reference to the treatment to be adopted in cases of asphyxia after submersion, Dr. Waters recommended friction, moderate temperature, and the use of the movements recommended by Dr. Marshall Hall. Dr. Silvester had only by this method obtained a displacement of one cubic inch of air. In his (the Author's) experiments on the dead body, he had succeeded in displacing eight or ten cubic inches, which would probably be sufficient. He believed that the position in which the body was placed, in Dr. Marshall Hall's method, was of great importance, in allowing fluids to fall forwards out of the mouth. In reply to Dr. Wynn Williams, Dr. Waters said that he had not injected warm water into the veins. He had occasianally seen convulsions occur in animals placed in the bath.

Dr. EDWARD SMITH remarked, in reference to the action of heat and cold on respiration, that hot air, as in the Turkish bath, increases respiration, as a person respires more frequently in hot air than in cold. It also increased pulsation. By cold also the respiration was increased, just as the respiration is more frequent in winter than in summer. Heat acts as a general stimulant; cold as a shock; the latter increasing respiration, but not pulsation. It must be kept in mind that persons are submerged in *cold* water; and the chief point, Dr. Smith believed, was to maintain the temperature of the body so that pulsation might be increased, and thus respiration might be encouraged with more hope of success. He added, that the bath would act injuriously by the increased pressure on the chest, and also by the position not being a favourable one for respiration. As to the question of the warm bath preventing respiration by the skin, he would mention the mud baths of Germany, and also that persons would, in some parts of Germany, sit for many hours a-day in water, and that without any apparent detriment. He repeated, that the chief object was to maintain the temperature, but whether by the bath or by dry heat was a matter of question. When the respiration is normal, cold will excite respiration; but this will not apply to asphyxia.

A Paper, by Dr. HERMANN WEBER, was read, relating

CASES OF DISEASE OF THE PONS VAROLII.

The first case was that of P. S——, aged twenty-five, affected with tubercles of the lungs. In March, 1854, vertigo and weakness of the limbs of the right side were observed, without alteration of sensibility. In June the paralysis of movement in the right arm and leg was increased, in addition to which imperfect anæsthesia in the left side of the face and tongue was noted, as also contraction of the pupils, especially the right. In July, after bodily exertion and drinking, rapid increase of the motor paralysis in the limbs of the right side took place, followed by contraction and rigidity in the same, and also by diminution of sensibility. The limbs of the left side became likewise weaker; mastication, deglutition, and articulation defective. The sensibility in the right side of the face remained unaffected; in the left as mentioned before. On July 24, a paroxysm, of vertigo and convulsions, with only

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momentary loss of consciousness, but with permanent loss of power of articulation, deglutition, and protusion of tongue. The paralysis of the limbs of the right side was complete, of the left almost so; there was anæsthesia in those of the right, distinct diminution of feeling in those of the left side. Reflex function of limbs not quite destroyed. Both pupils contracted. Death eighteen hours after seizure, under the phenomena of paralysis of respiration. *Post-mortem.*—In the substance of the left half of the pons Varolii, in close proximity to the superficial origin of the left quintus, a tubercle of the diameter of half an inch was found, with softening of the surrounding tissue, extending posteriorly almost to the floor of the fourth ventricle, and towards the right side beyond the middle line. Hæmorrhage into the softened tissue. The left trigeminus thinner than the right. Three periods can be distinguished in this case. The first, from the commencement of the head symptoms until July 8, corresponding to the growth of the tubercle in the lower part of the left half of the pons, pressing on the peripheric portion of the left quintus. The second, from July 8 to July 24, rapidly increasing softening in the neighbourhood of the tubercle, extending to the posterior layers of the left half of the pons, and also into the tissue of the right half, being the anatomical conditions of the period. The third period, beginning with the convulsive attack on the 24th, and comprising the last eighteen hours before death, is connected with the hæmorrhage into the softened tissues, disturbing by pressure also the adjacent healthy parts.

Case 2.—C. L., a boy, aged 7, affected with chronic hydrocephalus and tubercles of the lungs, had first, towards the end of May, 1856, attacks of convulsions in the left arm, without loss of consciousness; later, the convulsions also attacked the left leg. In the beginning of July vertigo was frequently complained of, and about the same time also pain in the right half of the face, especially the teeth, the convulsive attacks in the limbs of the left side having become more frequent. Towards the end of the same month contraction of the pupils was remarked; and in August weakness and wasting of the left arm and leg, without alteration of sensibility. In September the motor paralysis of the limbs of the left side became increased, the convulsions fainter; the pain in the right side of the face became diminished, and was succeeded by anæsthesia. The left pupil was more contracted than the right. In October there were attacks of violent shaking of the whole body, without impairment of consciousness. In the second half of November difficulty of articulation and deglutition occurred; irregularity of breathing during sleep; contraction of the paralysed limbs. Towards the close of the first half of December the symptoms of tubercular meningitis supervened (namely, headache, sickness, constipation, diminished frequency and irregularity of the pulse, and coma). Death took place on December 31, 1856. *Post-mortem.*—In addition to the phenomena of tubercles of the lungs tubercular meningitis, with increased amount of fluid in the dilated ventricles, a tubercle, between the size of a pea and that of a small hazel-nut, was found in the lower portion of the right half of the pons, near the right quintus, with atrophy of the latter. The nerve-tissue of the pons surrounding the tubercle was softened, of a yellowish-red colour, exhibiting under the microscope many granule-corpuscles (exudation corpuscles). The softening did not extend quite to the middle line, and left the posterior layers of the pons unaffected. In this case again the phenomena are easily divided into three periods—the first, from the beginning of the convulsive attacks in May until the middle of November, the anatomical alteration being a small tubercle in the anterior portion of the right half of the pons, near the peripheric origin of the right quintus; the second period, from the middle of November to nearly the middle of December, anatomically characterised by the red softening of the tissue surrounding the tubercle in the pons; the third period exhibiting the phenomena of tubercular meningitis. In comparing the symptoms of these two cases during the first period, when the anatomical alterations were almost the same in both, we find as principal differences, that in Case 2 the limbs of the side opposite to the central lesion were attacked by fits of convulsions previously to their being paralysed; that further, in the same case, pain in the side of the face corresponding to the lesion preceded the anæsthesia; and that the same child had later fits of general shaking, phenomena which were absent in Case 1. These phenomena, witnessed only in one case, may be considered as being not the necessary effect of the palpable local alteration, but due to accessory circumstances—as, for instance, a peculiar disposition, an especial state of irritability in the individual in which they occur, by which disposition the functions of other centres of the nervous system are more easily disturbed, the parts of the brain functionally disordered being frequently more or less distant from those anatomically diseased. There are, on the other side, many corresponding symptoms in both cases: as motor affection, first of the arm, then also of the leg of the side opposite to the anatomical lesion; attacks of vertigo; contraction of the pupils, more so of the one opposite to the tumour; sensitive affection of the face and tongue on the side of the tumour (which, however, is due merely to the relation of the tumour to the fifth nerve); the sensibility of the limbs of either side unaffected, until to the second period, when, in Case 1, anæsthesia came on in those of the side opposite to the lesion; wasting of the paralysed limbs, and later rigidity in the same; at a very late stage only, impaired articulation, deglutition, and respiration; integrity of the intellectual functions and special senses throughout. The physiological inferences which offer themselves are: 1. That the nerve fibres for the limbs, passing through the pons, as well motor as sensitive, decussate below the pons. 2. That there are no sensitive fibres for the limbs in the anterior (inferior) portion of the pons. 3. That the posterior (superior) portion of the pons contains sensitive fibres for the limbs. 4. That the intellectual functions of the brain, and also of the special senses, are independent of the pons. 5. That nerves regulating the state of the pupils are in close connexion with the pons. 6. That extensive lesion of the pons is associated with disturbance of deglutition, articulation, and respiration. These two cases are of great value, on account of the isolated and limited lesion, and the comparatively slow progress of the disease, allowing time for repeated observations. The third case corroborates some of the preceding inferences; with regard to others, it is, through its more complicated nature, of no interest.

Case 3.—E. S., a female, aged 49, during the last ten years subject to privation and cold, during the last six years often affected with bronchitis, was in September, 1858, suddenly seized with loss of muscular power in the left side of the body, without loss of consciousness, and with only transitory impairment of sensation in the left side. After eleven weeks the paralysis of the left side of the face had almost disappeared; that of the leg was considerably, that of the arm only slightly improved. On December 30 of the same year the woman lost almost suddenly the power of speaking, swallowing, and protruding the tongue. The right arm was completely paralysed to motion and sensation, the left almost so, and in both legs the motor and sensitive powers were very limited. The reflex function was not quite destroyed. Both pupils were contracted. The consciousness of the patient was unaffected, and remained so until death, but seemed to have been disturbed for a short time in the beginning of the attack. The senses of sight and hearing were free. Dyspnœa and irregularity of breathing, with signs of pneumonia supervened, and death occurred on January 5—viz., at the end of the seventh day. *Post-mortem.*—Remains of an old clot of blood close to the anterior and exterior portion of the right corpus striatum. Yellow softening, of the circumference of a small hazel-nut, in the centre of the superior portion of the pons Varolii—*i. e.*, in the end nearest to the crura cerebri, the softened tissue exhibiting under the microscope fat-globules and granules of various size, only traces of nerve-fibres, and no granule-corpuscles (exudation corpuscles).

Dr. Webster had listened with great pleasure to the very able paper by Dr. Hermann Weber,—whose cases were of great interest on account of the rarity of disease of the pons Varolii; such cases were so rare that any case was of great interest. In several papers which he had brought before the Society (the results of which were published in the Medico Chirurgical *Transactions*) he had given the results of the examination of two hundred and ninety-eight cases of cerebral disease; the pons Varolii had been only affected twice, and then but in a very slight degree. This experience may be considered as being in favour of the inference that the intellectual functions of the brain are independent of the pons Varolii.

The Author then briefly replied.

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OBITUARY.

JOSEPH HOULTON, M.D., M.R.C.S. (a)

After a liberal education, both preliminary and professional, Mr. Houlton was appointed Assistant-Surgeon in the East Norfolk Militia, and after three or four years became Surgeon to that Regiment. He retired from the public service in 1817, and commenced private practice in Saffron Walden, Essex. In 1823 he removed to Lisson-grove, London, where he practised with success for many years. During the early years of his practice he translated M. Bichat's work on the "Mucous Membranes" and M. Majendie's "Formulary for the Preparation of Various New Remedies." He also contributed papers on fevers, vaccination, ringworm, and the medicinal properties of several plants, to the monthly Medical Journals. He was soon afterwards appointed Professor of Botany to the Medico-Botanical Society; and was also licensed Lecturer on Botany by the Society of Apothecaries. In 1828 Mr. Houlton directed attention to the esculent qualities of the Stachys Palustris, for which he received the silver Ceres medal from the Society of Arts. Soon after this time the Profession became indebted to him for the first published account of the process and of the advantages of spontaneous evaporation in the preparation of vegetable extracts—a process now extensively applied not only in the preparation of medicines, but also in various arts and manufactures.

Mr. Houlton's scientific and professional attainments readily acquired for him a Medical degree; but he continued the general practice of his profession for many years, until the state of his health required him first to relax, and afterwards altogether to retire, from practice.

The writer of this was well acquainted with Dr. Houlton, from 1824 until his death, frequently met him in consultation, and was thus, as well as by conversations with him, enabled to form an estimate of his talents and attainments: of these the writer entertained a very high opinion. Dr. Houlton's scientific acquirements were considerable, and his professional knowledge, obtained from close observation of the phenomena and course of disease and of the operation of remedies, was of the highest order. He possessed a cultivated mind, refined taste, strict integrity, and the sentiments and principles of a sincere Christian. He closed his life, after a very protracted illness, on January 14, 1861, at his residence, 12, Blomfield-street, Westbourne-terrace, in the seventy-second year of his age.

MEDICAL NEWS.

Royal College of Surgeons of England (b).—At a Meeting of the Court of Examiners, held on Tuesday, the 21st inst., the following gentlemen, having passed the necessary Examinations, were admitted Members of the College by Diploma, viz.:—

Gardner, C., Toronto. | Smith, J., Wheatley
Thomas, W. L., Horsham.

Apothecaries' Hall.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise on Thursday, May 16th:—

Furse, Edwin, South Molton, Devon
Goldsmith, George Pocock, Bedford
Hale, Edmund Thomas, Beaufort, South Wales
Jackson, Thomas, Leeds
Robinson, Edmund, Birmingham
Wilkinson, Charles, Kentish-Town.

APPOINTMENTS.

Cardell.—John Magor Cardell, F.R.C.S., etc., has been elected Surgeon to the Salisbury Infirmary, in the room of Mr. John Andrews, resigned.

Chambers.—Dr. Chambers has been appointed one of the Medical Public Examiners in the University of Oxford.

Downing.—Dr. Downing, of Deptford, has been appointed one of the Surgeons to the Royal Kent Dispensary for the district of Deptford in the room of Dr. Bakewell, resigned.

Druitt.—Dr. Robert Druitt, of Hertford-street, May Fair, has been appointed Analyst for the parish of St. George, Hanover-square.

Foster.—George Frederick Charles Foster has succeeded Mr. John Fryer, resigned, as Assistant Resident Medical Officer of the Leeds General Infirmary.

Leachman.—Albert Warren Leachman, M.D. St. Andrews, M.R.C.S. Eng., has been appointed Physician to the Metropolitan Dispensary, Fore-street, Cripplegate, in the room of Dr. Meeres, resigned.

March.—Mr. H. C. March has been elected Resident Surgeon to the Reading Dispensary, vacant by the resignation of Mr. Ord.

Rolleston.—Dr. Rolleston, of Pembroke College, Oxford, has been appointed one of the Medical Public Examiners in the University of Oxford.

Royal Portsmouth, Portsea, and Gosport Hospital.—The following gentlemen have been placed on the In-door Staff:—K. E. Knight, M.R.C.S.L., L.S.A.; J. W. M'Miller, M.D., M.R.C.P.L.; H. B. Norman, F.R.C.S. (exam.), L.S.A.; E. K. Parson, M.R.C.S.L., L.S.A. The undermentioned have also been placed on the Out-door Staff:—J. R. Cousens, M.D. Lond., L.S.A.; F. Page, M.D., L.S.A., T. P. Simpson, M.D., L.S.A.; H. Taylor, M.D., L.S.A. Gosport: H. Rundle, M.D.; H. Wharton, M.R.C.S.L., L.S.A.

DEATHS.

Brown.—May 17, Mark Brown, of Ryde, Isle of Wight, M.D. Giessen, L.R.C.P. Edin. (exam.), M.R.C.S. Eng., L.S.A., aged 55.

Heath.—May 14, Nicholas William Heath, of Stratford, Baltinglass, County Wicklow, F.R.C.S. Ireland, L.R.C.S.

Madden.—May 21, James M. Madden, of Heavitree, Exeter, L.R.C.S. and L.A.H. Dublin, Surgeon, Royal Navy, on the retired list (seniority, October 5, 1822).

Mason.—March 2, at Maldon, Australia, Charles Edwin Mason, formerly of Kingston-on-Thames, aged 36.

Osborne.—May 19, John Osborne, of Breck-road, Everton, Liverpool, aged 38.

Owen.—May 12, William Owen, of Salford, formerly of Manchester, M.R.C.S. Eng., L.S.A.

Steggall.—April 26, at Constantinople, Dr. Edward G. Steggall, second son of Dr. Steggall, of Southampton-street, Bloomsbury-square.

Tapley.—May 19, Thomas Knight Tapley, of Great Torrington, Devonshire, M.R.C.S. Eng., L.S.A. Lond.

Germs and Vestiges of Disease.—Dr. Dobell commenced a course of lectures at the Chest Infirmary, in the City-road, last week. His introduction was devoted to the inquiry how far the organism is capable of effecting the repair and reproduction of damaged parts without the instrumentality of man.

Her Majesty's Levee.—At the last *levee* the following gentlemen were presented:—Assistant-Surgeon W. F. Davis, M.D., by the Secretary of State; Surgeon-Major Frederic Mouat, by the Secretary of State for India; Dr. O'Connor, by Lord Fermoy; Surgeon John Turner, by the Secretary of State for India.

Prize Question.—The German Society of Psychiatrie and Juridical Psychology offers a prize of 100 thalers for the best essay on the following subject:—"What is the Classification of Mental Disturbances which is likely to prove most Serviceable in regard to Practical Medicine?" Essays to be sent to Dr. Erlenmeyer, Secretary to the Society, at Bendorf, near Coblenz, in the course of the present year.

Metria and Erysipelas.—The Registrar General for Scotland says:—"Metria still prevails, having caused seven deaths; while nine deaths were attributed to erysipelas. As it has been convincingly proved that metria is chiefly kept up by the infection of erysipelas being conveyed to the woman in child-bed, it ought to be adopted as a rule, to which no exceptions should be allowed, that no Medical man in attendence on a case of erysipelas should attend a woman during her confinement."

Typhus at Naples.—The Correspondent of the French *Constitutionnel*, writing from Naples at the end of last month, says that he is enabled to state, from the perusal of official documents, that, in the space of three months, two-thirds of the Medical officers and nurses of the Hospitals of Naples and its environs have been carried off by typhus. This disease prevailed there no less severely amidst the population of the city, especially attacking young children.

Ethnological Society.—The annual meeting of this Society was held on Wednesday, May 15, Mr. John Crawfurd, President of the Society, in the chair. The day of meeting was changed from Wednesday to Tuesday, and the hour from half-past eight to eight o'clock. The meetings

(a) We are indebted to Dr. Copland for this memoir.

(b) This College is the only one which does not send lists of New Members to the Medical Journals.—Hence frequent mistakes, for which the Journals are not responsible.

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will for the future be held fortnightly instead of monthly. The following gentlemen were elected Officers and Council for the ensuing year :—*President :* Mr. John Crawfurd. *Vice-Presidents :* John Conolly, M.D., Sir B. C. Brodie, B. Botfield, M.P., Sir James Clark. *Treasurer :* F. Hindmarsh. *Hon. Secretaries :* Thomas Wright and James Hunt. *Hon. Librarian :* L. J. Beale. *Council :* L. Burke, Sir J. Boileau, Rev. E. J. Selwyn, T. F. D. Croker, R. Dunn, T. Hodgkin, M.D., Sir A. W. Clavering, Professor Pearson, C. R. des-Ruffières, E. O. Smith, H. Tuke, M.D., Stephen Ward, M.D., J. W. Fleming, H. Christy, J. Wood, W. Napier.

ROYAL MEDICAL BENEVOLENT COLLEGE.—On Friday May 17, the Anniversary Festival of this Institution, at which Lord Chelmsford presided, was held at Willis's Rooms. The portion of the building destined for the school was in May last so far completed as to accommodate 150 boys, but only five pensioners' houses, containing twenty residences, had been then built. There are resident in the College twenty pensioners, being aged Medical men or their widows, each of whom is provided with three comfortably-furnished rooms, an allowance of coals, and a pension of £15 a-year ; also 150 boys, sons of Medical men, forty of whom, being the Foundation Scholars, are educated and maintained at the expense of the Institution. So far the boys educated at the school have acquitted themselves with credit in all the public examinations and competitions to which they have been subjected. The College is possessed of funded property to the aggregate amount of about £4450. A recent arrangement admitting ladies as life governors on payment of £5 5s. has resulted in the receipt of £2300, Her Majesty graciously heading the list with a donation of £100. The annual subscriptions last year amounted to £3150, the donations to £1428 ; and bequests to £540. Of a loan of £7000 on mortgage, £6000 has been paid off, leaving a balance of £1000. The Chairman in the course of the evening related the history and circumstances of the Institution, and earnestly commended it to the public support. The subscriptions in aid of its funds after the dinner amounted to about £1000. To show the necessity for such an institution, it may be stated that at the last election there were eleven unsuccessful candidates for Pensionerships, and thirty-one unsuccessful competitors for Foundation Scholarships.

BETHLEM HOSPITAL.—The staff of officers comprises a Resident Physician, at a salary of £800, a Surgeon, at £80, chaplain, £200, apothecary, £350, surveyor, £125, clerk and receiver, £250, steward, £300, matron, £150. Besides these there are twelve attendants, thirteen artizans, and subordinate officers and servants, whose united salaries amount to £2401 6s. There are twenty-seven female servants, whose united salaries amount to £654 ; thus the total expenditure for salaries is £5310 6s., and in the majority of cases there are added to the salary board and lodging. In such an establishment a large and efficient staff is a matter of the first consideration, and it would doubtless be impossible for any, except those immediately engaged in the affairs of the place, to say that in this respect a single penny is wasted. In addition to the heavy charge for salaries, we find that provisions for patients and household amounted to £6468 6s. 6d., clothing, bedding, and other necessaries of the same class, £4281 17s. 4d.; repairs, £2532 17s. 4d.; superannuation annuities, £1002 10s.— *City Press.*

BIRMINGHAM AND MIDLAND COUNTIES MEDICAL REGISTRATION ASSOCIATION.—The second annual meeting of this Association was held at Birmingham on the 16th instant, Dr. Anthony, the retiring President, in the chair. The Report, which was unanimously adopted, stated that, owing to the very loose construction of the Medical Act, the Committee (though hitherto successful in all their cases) had been compelled to exercise very great caution in regard to prosecutions, but that they were determined to carry any case into court if the evidence was clear and decisive. The number of members was reported as 140. The Treasurer reported a balance in hand of £3 8s. The following officers were elected for the ensuing year, and, votes of thanks having been passed to the retiring officers, the proceedings terminated:—*President:* John Postgate, F.R.C.S. *Vice-Presidents :* C. Townsend and E. Cheshire, Birmingham ; C. Male, West Bromwich ; G. H. Whymper, Walsall. *Treasurer :* George Yates, 24, Paradise-street, Birmingham. *Honorary Secretary :* J. Garner, Birmingham. *Solicitor* : A. Walter, Esq., Waterloo-street, Birmingham. *Committee :* R. L. Baker, Dr. Boisragon, C. Bracey, John Carter, P. H. Chavasse, Bell Fletcher, M.D., W. R. Jordan, C. S. Meeke, O. Pemberton, T. P. Heslop, M.D., J. Warnock, all of Birmingham ; E. F. Dehane, Wolverhampton; W. E. Johnson, Dudley; H. Knight, M.D., Stafford ; W. W. Scofield, Highgate ; D. H. Monckton, M.D., Rugeley ; A. Allcock, Smethwick ; J. Brown, Oldbury ; T. Thompson, M.D., Leamington ; J. Anthony, M.D. ; W. L. Underhill, Tipton ; C. L. Bloxham, Halesowen ; H. Wilson, Stourbridge; J. F. Woody, Tamworth.

ROYAL MEDICAL BENEVOLENT COLLEGE.—Our readers will be glad to hear that the Council of this College have received a letter from Sir James Clark, Bart., to the effect that, out of the proceeds of a subscription for a Testimonial to Dr. Hodgkin, an educational prize to the school of the Royal Medical Benevolent College has, under certain conditions, been established by a deed, the Trustees being Sir James Clark, Dr. Sibson, and Dr. Hodgkin. The subscriptions amounted to £281 12s. 6d., out of which sum a commemorative piece of plate was presented to Dr. Hodgkin, and, after deducting the expenses, the remainder, £204 10s., was invested in Madras Irrigation Shares. The interest of this fund is guaranteed by the Indian Government and at present produces £10 a year, which will be increased if the Company's dividends exceed 5 per cent. That the prize may be better worth striving for, it will only be given every alternate year, and the first competition will take place during this summer.

OVARIOTOMY IN BIRMINGHAM.—A Correspondent of the *British Medical Journal* says : — "The history of ovariotomy in this town is of use, as showing how the establishment of new operations may be delayed by accidental circumstances in no way affecting their merits. Some ten years ago, an able and enterprising Surgeon performed ovarian section at one of our public institutions. The case, like many others, was not successful, although the operation was as well performed as the science of that time permitted. Nevertheless, the result of this case has been that, for ten years, Birmingham has contributed nothing to the statistics of a proceeding, by the adoption of which a distinguished accoucheur stated the other day that he had done more for humanity in three months than in the whole of his previous practice,—as regards, at least, this fatal and too frequent disease. It is true that it has been done here once since ; but no account of the case was presented to us for discussion, and, indeed, none published, till a short epitome appeared the other day in Professor Clay's 'Appendix on Ovariotomy.' Under these circumstances, much credit is due to Professor Clay for undertaking its performance ; and, perhaps, still more for at once bringing before us the particulars of an unsuccessful case. He has done good service by securing an expression of opinion favourable to the operation, whilst his surgical dexterity was unanimously applauded during the discussion which followed at this and a succeeding meeting. Dr. Nelson, Messrs. Bolton, Gamgee, Furneaux Jordan, Pemberton, Yates, and others, took part in the debate, and each speaker expressed a decided opinion that, in suitable cases, ovariotomy should be performed, an opinion which, when opportunity offered, they were individually prepared to act upon."

VITAL STATISTICS OF LONDON.

Week ending Saturday, May 18, 1861.

BIRTHS.

Births of Boys, 1013 ; Girls, 922 ; Total, 1935.
Average of 10 corresponding weeks, 1851-60, 1622·2.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	624	595	1219
Average of the ten years 1851-60	559·4	505·1	1064·5
Average corrected to increased population..	..	..	1771
Deaths of people above 90	..	..	3
Deaths in 15 General Hospitals	33	21	59

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DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1851.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	376,427	1	6	4	3	11	4	1
North ..	490,396	1	2	8	6	21	5	2
Central ..	393,256	1	5	1	3	17	8	3
East	485,522	..	5	8	2	19	4	..
South ..	616,635	3	..	5	2	28	3	1
Total.. ..	2,362,236	6	18	21	16	96	19	7

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	30·049 in.
Mean temperature	51·9
Highest point of thermometer	77·9
Lowest point of thermometer	33·7
Mean dew-point temperature	45·2
General direction of wind	N.E.
Whole amount of rain in the week	0·06 in.

BOOKS RECEIVED.

Roll of the Royal College of Physicians of London. By W. Munk, M.D. London: 1861.

The Great Crime of 1860. By J. W. Stapleton, M.R.C.S. London: 1861.

New Sydenham Society's Atlas of Skin Diseases. London: 1861.

Household Verses on Health and Happiness. London: 1861.

Advice to a Wife. By P. H. Chavasse, F.R.C.S. London: 1861.

The Autobiography of Sir James McGrigor, Bart. London: 1861.

The Prevention of Spinal Deformities. By M. Roth, M.D. London: 1861.

Instructions to Mothers and Nurses in the Lying-in Chamber. By J. C. Long Marsh, M.D. London: 1861.

Sulphuric Ether and Chloroform as Anæsthetics. By F. Lente, M.D. Philadelphia: 1861.

Metanoia. By H. McCormac, M.D. London: 1861.

Ourselves, our Food, and our Physic. By B. Ridge, M.D. London: 1861.

Oration delivered by the Hunterian Society. By W. Gull, M.D. London: 1861.

Ready Rules for Operations in Surgery. By Allan Webb, M.D., Second Edition. London: 1861.

A Manual of Minor Surgery and Bandaging. By C. Heath, F.R.C.S. London: 1861.

British Wild Flowers, Illustrated. By J. E. Sowerby. London: 1861.

Medical Times and Gazette.

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NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

The Proof of Dr. Simpson's concluding Lecture had not arrived at the hour of going to press.

Dr. Anderson's Eighth Paper on Parasitic Affections of the Skin is unavoidably delayed until next week.

East Anglian.—We should be glad of a more detailed report of the inquest.

Dr. McCormac.—We think it would be unwise to continue the discussion. Nothing can be more absurd than the introduction by a Dublin contemporary of the question of *nationality* into a matter of this kind.

Enquirer could learn the precise amount of salary and allowances on application to the Secretary of the Peninsular and Oriental Company. The pay varies in different ships, and according to length of service.

The Air Pressure Gauge.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In the drawing of a contrivance of mine for determining minute differences of pressure, contained in your last number, your artist has committed an error, which I hope you will allow me to correct. The inclination of the instrument, as represented, is reversed. In order to render its working intelligible, the reader must be good enough to suppose the bend of the glass tube to be at the lower end of the scale, and the open ends, to one of which the flexible tube is attached, at the upper.

I am, &c.

9, Gloucester-place, May 20. W. B. Sanderson, M.D.

Tetanus after Tying Uterine Polypi.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Can any of your readers inform me as to the comparative frequency or rarity of the occurrence of tetanus after the ligature of uterine polypi? I have lately lost a patient on the seventh day after strangulation in the usual way by means of Gooch's instrument. The tumour, weighing three and a-half ounces, came away on the sixth day. The usual precautions, such as syringing out the vagina, were all carefully observed. Death occurred in twenty-four hours from the time of seizure.

I am, &c.

Evercreech, near Bath, May 22. F. Porter Smith.

COMMUNICATIONS have been received from:—

Dr. Robert Lee; Dr. Conolly; Dr. Copland; Dr. McWilliam; Registrar-General; Dr. Reed; Mr. Ellis; Mr. Wales; Mr. Garner; Dr. Smyth; Mr. Pearson; Mr. Freeman; Mr. Reed; Mr. Cox; Mr. Foster; Messrs. Fothergill; Mr. Frith; Mr. Evans; Mr. Dolby; Mr. McNicoll; Dr. Smith; Messrs. Pollard.

APPOINTMENTS FOR THE WEEK.

May 25. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

Royal Institution, 3 p.m. Max Müller, Esq., "On the Science of Language."

27. Monday.

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

28. Tuesday.

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

Royal Institution, 3 p.m. Mr. John Hullah "On the History of Modern Music."

Royal Medical and Chirurgical Society, 8½ p.m. Dr. Dickinson "On Diseases of the Kidney, accompanied by Albuminuria." Mr. E. Sercombe "On Uterine Derangement Apparently Depending upon Diseased Teeth." Mr. Henry Lee "On Effects of Reflex Nervous Irritation from Syphilitic Disease of the Bones of the Skull."

29. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

30. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.

Royal Institution, 3 p.m. Mr. Pengelly "On the Devonian Age of the World."

Junior Medical Society of London, 8 p.m., at Charing-cross Hospital. Mr. Edgar A. Browne, V.P., "On Excision of the Knee-joint."

31. Friday.

Operations, Westminster Ophthalmic, 1½ p.m.

Samaritan Hospital Lectures, 4 p.m. Mr. Spencer Wells "On Remediable Causes of Sterility."

Royal Institution, 3 p.m. Dr. A. Y. Waller "On the Nutrition and Reparation of Nerves."

EXPECTED OPERATIONS.

Westminster Hospital.—The following Operations will be performed on Tuesday next, at 2 o'clock:—

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ORIGINAL LECTURES.

ON THE APPLICATION OF THE LAW OF CONSERVATION OF FORCE TO ORGANIC NATURE.(a)

DELIVERED AT

The Royal Institution,

By PROFESSOR HELMHOLTZ, F.R.S.

FRIDAY, APRIL 12, 1861.

THE most important progress in natural philosophy by which the present century is distinguished, has been the discovery of a general law which embraces and rules all the various branches of physics and chemistry. This law is of as much importance for the highest speculations on the nature of forces, as for immediate and practical questions in the construction of machines. This law at present is commonly known by the name of "the principle of conservation of force." It might be better perhaps to call it, with Mr. Rankine, "the conservation of energy," because it does not relate to that which we call commonly *intensity* of force. It does not mean that the intensity of the natural force is constant; but it relates more to the whole amount of power which can be gained by any natural process, and by which a certain amount of work can be done. For example: if we apply this law to gravity, it does not mean, what is strictly and undoubtedly true, that the intensity of the gravity of any given body is the same as often as the body is brought back to the same distance from the centre of the earth. Or with regard to the other elementary forces of nature—for example, chemical force: when two chemical elements come together, so that they influence each other, either from a distance or by immediate contact, they will always exert the same force upon each other—the same force both in intensity and in its direction and in its quantity. This other law, indeed, is true; but it is not the same as the principle of conservation of force. We may express the meaning of the law of conservation of force by saying, that every force of nature, when it effects any alteration, loses and exhausts its faculty to effect the same alteration a second time. But while, by every alteration in nature, that force which has been the cause of this alteration is exhausted, there is always another force which gains as much power of producing new alterations in nature as the first has lost. Although, therefore, it is the nature of all inorganic forces to become exhausted by their own working, the power of the whole system in which these alterations take place is neither exhausted nor increased in quantity, but only changed in form. Some special examples will enable you better to understand this law than any general theories. We will begin with gravity; that most general force, which not only exerts its influence over the whole universe, but which at the same time gives the means of moving to a great number of our machines. Clocks and smaller machines, you know, are often set in motion by a weight. The same is really the case with water-mills. Water-mills are driven by falling water; and it is the gravity, the weight of the falling water, which moves the mill. Now you know that by water-mills, or by a falling weight, every machine can be put in motion; and that by these motive powers every sort of work can be done which can be done at all by any machine. You see, therefore, that the weight of a heavy body, either solid or fluid, which descends from a higher place to a lower place is a motive power, and can do every sort of mechanical work. Now if the weight has fallen down to the earth, then it has the same amount of gravity, the same intensity of gravity; but its power to move, its power to work, is exhausted; it must become again raised before it can work anew. In this sense, therefore, I say that the faculty of producing new work is exhausted—is lost; and this is true of every power of nature when this power has produced alteration. Hence, therefore, the faculty of producing work, of doing work, does not depend upon the intensity of gravity. The intensity of gravity may be the same, the weight may be in a higher position or in a lower position, but the power to work may be quite different. The power of a weight to work, or the amount of work which can be produced by a weight, is measured by the product of the height to which it is raised and the weight itself. Therefore our common measure is foot-pound; that is, the product of the number of feet and the number of pounds. Now, we can by the force of a falling weight raise another weight; as, for example, the falling water in a water-mill may raise the weight of a hammer. Therefore it can be shown that the work of the raised hammer, expressed in foot-pounds, that is, the weight of the hammer multiplied by the height expressed in feet to which it is raised, —that this amount of work cannot be greater than the product of the weight of water which is falling down, and the height from which it fell down. Now we have another form of motive power, of mechanical motive power; that is, velocity. The velocity of any body in this sense, if it is producing work, is called *vis viva*, or living force, of that body. You will find many examples of it. Take the ball of a gun. If it is shot off, and has a great velocity, it has an immense power of destroying; and if it has lost its velocity, it is quite a harmless thing. The great power it has depends only on its velocity. In the same sense, the velocity of the air, the velocity of the wind, is motive power; for it can drive windmills, and by the machinery of the windmills it can do every kind of mechanical work. Therefore, you see that also velocity in itself is a motive force.

Take a pendulum which swings to and fro. If the pendulum is raised to the side, the weight is raised up; it is a little higher than when it hangs straightly down, perpendicular. Now if you let it fall, and it comes to its position of equilibrium, it has gained a certain velocity. Therefore, at first, you had motive power in the form of a raised weight. If the pendulum comes again to the position of equilibrium, you have motive power in the form of *vis viva*, in the form of velocity, and then the pendulum goes again to the other side, and it ascends again till it loses its velocity; then again, *vis viva* or velocity is changed into elevation of the weight: so you see in every pendulum that the power of a raised weight can be changed into velocity, and the velocity into the power of a raised weight. These two are equivalent.

Then take the elasticity of a bent spring. It can do work, it can move machines or watches. The cross-bow contains such springs. These springs of the watch and cross-bow are bent by the force of the human arm, and they become in that way reservoirs of mechanical power. The mechanical power which is communicated to them by the force of the human arm, afterwards is given out by a watch during the next day. It is spent by degrees to overpower the friction of the wheels. By the cross-bow, the power is spent suddenly. If the instrument is shot off, the whole amount of force which is communicated to the spring is then again communicated to the shaft, and gives it a great *vis viva*.

Now the elasticity of air can be a motive power in the same way as the elasticity of solid bodies; if air is compressed, it can move other bodies; let us take the air-gun; there the case is quite the same as with the cross-bow. The air is compressed by the force of the human arm; it becomes a reservoir of mechanical power; and if it is shot off, the power is communicated to the ball in the form of *vis viva*, and the ball has afterwards the same mechanical power as is communicated to the ball of a gun loaded with powder.

The elasticity of compressed gases is also the motive power of the mightiest of our engines, the steam-engine; but there the case is different. The machinery is moved by the force of the compressed vapours, but the vapours are not compressed by the force of the human arm, as in the case of the compressed air-gun. The compressed vapours are produced immediately in the interior of the boiler by the heat which is communicated to the boiler from the fuel.

You see, therefore, that in this case the heat comes in the place of the force of the human arm, so that we learn by this example, that heat is also a motive power. This part of the subject, the equivalence of heat as a motive power, with mechanical power, has been that branch of this subject which has excited the greatest interest, and has been the subject of deep research.

It may be considered as proved at present, that if heat produces mechanical power, that is, mechanical work, a certain amount of heat is always lost. On the other hand, heat can be also produced by mechanical power, namely, by friction and the concussion of unelastic bodies. You can bring a piece

a) From the *Proceedings of the Royal Institution of Great Britain.*

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of iron into a high temperature, so that it becomes glowing and luminous, by only beating it continuously with a hammer. Now, if mechanical power is produced by heat, we always find that a certain amount of heat is lost; and this is proportional to the quantity of mechanical work produced by that heat. We measure mechanical work by foot-pounds, and the amount of heat we measure by the quantity of heat which is necessary to raise the temperature of one pound of water by one degree, taking the Centigrade scale. The equivalent of heat has been determined by Mr. Joule, of Manchester. He found that one unit of heat, or that quantity of heat which is necessary for raising the temperature of a pound of water one degree Centigrade, is equivalent to the mechanical work by which the same mass of water is raised to 423½ metres, or 1389 English feet. This is the mechanical equivalent of heat.

Hence, if we produce so much heat as is necessary for raising the temperature of one pound of water by one degree, then we must apply an amount of mechanical work equal to raising one pound of water 1389 English feet, and lose it for gaining again that heat.

By these considerations, it is proved, that heat cannot be a ponderable matter, but that it must be a motive power, because it is converted into motion or into mechanical power, and can be either produced by motion or mechanical power. Now, in the steam-engine we find that heat is the origin of the motive power, but the heat is produced by burning fuel, and therefore the origin of the motive power is to be found in the fuel, that is, in the chemical forces of the fuel, and in the oxygen with which the fuel combines.

You see from this, that the chemical forces can produce mechanical work, and can be measured by the same units and by the same measures as any other mechanical force. We may consider the chemical forces as attractions, in this instance, as attraction of the carbon of the fuel for the oxygen of the air; and if this attraction unite the two bodies, it produces mechanical work just in the same way as the earth produces work, if it attract a heavy body. Now the conservation of force, of chemical force, is of great importance for our subject to-day, and it may be expressed in this way. If you have any quantity of chemical materials, and if you cause them to pass from one state into a second state, in any way, so that the amount of the materials at the beginning, and the amount of the materials at the end of this process be the same, then you will have always the same amount of work, of mechanical work or its equivalent, done during this process. Neither more nor less work can be done by the process. Commonly, no mechanical work in the common sense is done by chemical force, but usually it produces only heat; hence the amount of heat produced by any chemical process must be independent of the way in which that chemical process goes on. The way may be determined by the will of the experimenter as he likes.

We see, therefore, that the energy of every force in nature, can be measured by the same measure, by foot-pounds, and that the energy of the whole system of bodies which are not under the influence of any exterior body must be constant; that it cannot be lessened or increased by any change. Now the whole universe represents such a system of bodies endowed with different sorts of forces and of energy, and therefore we conclude from the facts I have brought before you, that the amount of working power, or the amount of energy in the whole system of the universe must remain the same, quite steady and unalterable whatever changes may go on in the universe. If we accept the hypothesis of Laplace, that in the first state the universe was formed by a chaos of nebulous matter, spread out through infinite space, then we must conclude, that at this time the only form of energy existing in this system was the attraction of gravitation, and it was therefore the same sort of energy as is possessed by a raised weight. Afterwards, astronomers suppose, this nebulous matter was conglomerated and aggregated to solid masses. Great quantities of this nebulous matter, possibly from a great distance, fell together, and thus their attraction, or the energy of their attraction, was destroyed, and hence heat must have been produced; and the facts we know at present are sufficient to enable us to calculate the amount of this heat, that is, of the whole heat which must have been produced during the whole process of conglomeration. This amount of heat is immensely great, so that it surpasses all our ideas and all the limits of our imagination. If we calculate this quantity of heat, and suppose that the sun contained at the same time the whole heat, and that the sun had the same specific heat as water, the sun would be heated to twenty-eight millions of degrees, that is, to a temperature surpassing all temperatures we know on earth; however, this temperature could not exist at any time in the sun, because the heat which was produced by the aggregation of the masses, must also be spent partially by radiation into space. I give only the result of these calculations in order that you may see from it what a great amount of heat could be produced in this way. The same process goes on also at present in the falling stars and meteors which come down to the earth from planetary spaces. Their velocity is destroyed by the friction of the air and by the concussion with the surface of the earth, and we see how they become luminous, and if they are found on the earth, we find them hot.

The sun also at present is hotter than any heated body here on the earth. That is shown by the latest experiments made by Professors Kirchhoff and Bunsen, of Heidelberg, on the spectrum of the sun, by which it is proved, that in the atmosphere of the sun, iron and other metals are contained as vapours which cannot be changed into vapours by any amount of heat on the earth.

Our earth contains a great amount of energy in the form of its interior heat. This part of its energy produces the volcanic phenomena; but it is without great influence upon the phenomena of the surface, because only a very small amount of this heat comes through. It can be calculated that the amount of heat which goes from the interior to the surface cannot raise the temperature of the surface any higher than the thirteenth part of a degree.

We have another power which produces motion on the surface of the earth. I mean the attraction of the sun and of the moon producing the tides.

All the other phenomena on the surface of the earth are produced by the radiation of the sun, by the sunbeams; and the greater part of those changes which occur on the surface of our earth, are caused by the heat of the sun. As the heat of the sun is distributed unequally over the surface, some parts of the atmosphere become heated more than other parts; the heated parts of the atmosphere rise up, and so winds and vapours are produced. They come down at first as clouds in the higher parts of the atmosphere, and then as rain upon the surface of the earth; they are collected as rivers, and go again down into the sea. So you see that all the meteorological phenomena of our earth are produced by the effect of the solar beams by the heat of the sun.

The light of the sun is the cause of another series of phenomena, and the principal products of the light of the sun are plants, because plants can only grow with the help of the sun-light. It is only by the help of the sun-light, that they can produce the inflammable matter which is deposited in the bodies of plants, and which is extracted from the carbonic acid and the water contained in the atmosphere, and in the earth itself.

This may give you an idea of the sense and bearing of the general principle on which I purpose to speak. As many English philosophers have been occupied with working out the consequences of this most general and imporant principle for the theory of heat, for the energy of the solar system, for the construction of machines, you will hear these results better explained by your own countrymen; I shall abstain from entering farther into this part of the subject. At the same time that Mr. Grove showed that every force of nature is capable of bringing into action every other force of nature, Mr. Joule, of Manchester, began to search for the value of the mechanical equivalent of heat, and to prove its constancy, principally guided by the more practical interests of engineering. The first exposition of the general principle was published in Germany by Mr. Mayer, of Heilbron, in the year 1842. Mr. Mayer was a Medical man, and much interested in the solution of physiological questions, and he found out the principle of the conservation of force guided by these physiological questions. At the same time also, I myself began to work on this subject. I published my researches a little later than Mr. Mayer, in 1845. Now, at first sight, it seems very remarkable and curious, that even physiologists should come to such a law. It appears more natural, that it should be detected by natural philosophers or engineers, as it was in England; but there is, indeed, a close connexion between both the fundamental questions of engineering and the fundamental questions of physiology with the conservation of force. For getting machines into motion, it is always necessary to have motive-power, either in water, fuel, or living

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animal matter. The constructors of machines, instruments, watches, within the last century, who did not know the conservation of force, were induced to try if they could not keep a machine in motion without any expenditure for getting the motive power. Many of them worked for a long time very industriously to find out such a machine which would give perpetual motion, and produce any mechanical work which they liked. They called such a machine a perpetual mover. They thought they had an example of such a machine in the body of every animal. There, indeed, motive-power seemed to be produced every day without the help of any external mechanical force. They were not aware that eating could be connected with the production of mechanical power. Food, they believed, was wanted only to restore the little damages in the machine, or to keep off friction, like the fat which made the axles of wheels to run smoothly. Now, at first, by the mathematicians of the last century, the so-called principle of conservation of *vis viva* was detected, and it was shown that by the action of the purely mechanical powers, it was not possible to construct a perpetual mover; but it remained still doubtful if it would not be possible to do so by the interposition of heat, or electricity, or chemical force. At last, the general law of conservation of force was discovered, and stated, and established; and this law shows that also by the connection of mechanical powers with heat, with electricity, or with chemical force, no such machine can be constructed to give a perpetual motion, and to produce work from nothing.

We must consider the living bodies under the same point of view, and see how it stands with them. Now, if you compare the living body with a steam-engine, then you have the completest analogy. The living animals take in food that consists of inflammable substances, fat and the so-called hydrocarbons, as starch and sugar, and nitrogenous substances, as albumen, flesh, cheese, and so on. Living animals take in these inflammable substances and oxygen, the oxygen of the air, by respiration. Therefore, if you take, in the place of fat, starch, and sugar, coals or wood, and the oxygen of the air, you have the substances in the steam-engine. The living bodies give out carbonic acid and water; and then if we neglect very small quantities of more complicated matters which are too small to be reckoned here, they give up their nitrogen in the form of urea. Now, let us suppose that we take an animal on one day, and on any day afterwards; and let us suppose that this animal is of the same weight the first day and the second day, and that its body is composed quite in the same way on both days. During the time—the interval of time—between these two days the animal has taken in food and oxygen, and has given out carbonic acid, water and urea. Therefore, a certain quantity of inflammable substance, of nutriment, has combined with oxygen, and has produced nearly the same substances, the same combinations, which would be produced by burning the food in an open fire, at least, fat, sugar, starch, and so on; and those substances which contained no nitrogen would give us, quite in the same way, carbonic acid and water, if they are burnt in the open fire, as if they are burnt in the living body; only the oxidation in the living body goes on more slowly. The albuminous substances would give us the same substances, and also nitrogen, as if they were burnt in the fire. You may suppose, for making both cases equal, that the amount of urea which is produced in the body of the animal, may be changed without any very great development of heat, into carbonate of ammonia, and carbonate of ammonia may be burnt, and gives nitrogen, water, and carbonic acid. The amount of heat which would be produced by burning urea into carbonic acid and nitrogen, would be of no great value when compared with the great quantity of heat which is produced by burning the fat, the sugar, and the starch. Therefore we can change a certain amount of food into carbonic acid, water and nitrogen, either by burning the whole in the open fire, or by giving it to living animals as food, and burning afterwards only the urea. In both cases we come to the same result.

Now, I have said that the conservation of force for chemical processes requires a fixed amount of mechanical work, or its equivalent, to be given out during this process; and the amount is exactly the same in whatever way the process may go on. And therefore we must conclude that by the animal as much work must be done, must be given out—the same equivalent of mechanical work—as by the chemical process of burning. Now let us remark that the mechanical work which is spent by an animal, and which is given to the external world, consists, firstly, in heat; and secondly, in real mechanical work. We have no other forms of work, or of equivalent of work, given out by living animals. If the animal is reposing, then the whole work must be given out in the form of heat; and therefore we must conclude that a reposing animal must produce as much heat as would be produced by burning its food. A small difference would remain for the urea; we must suppose that the urea produced by the animal is also burnt, and taken together with the heat immediately produced by the animal itself. Now we have experiments made upon this subject by the French philosophers Dulong and Desprez. They found that these two quantities of heat—the one emitted by burning, the other by the living animal—are nearly identical; at least, so far as could be established at that time, and with those previous researches which existed at that time. The heat which is produced by burning the materials of the food is not quite known even now. We want to have researches on the heat produced by the more complicated combinations which are used as food. Dulong and Desprez have calculated the heat according to the theoretical supposition of Lavoisier—which supposition is nearly right, but not quite right—therefore there is a little doubt as to the amount of the heat, but experiments show that at least to the tenth part of that heat the quantities are really equal; and we may hope if we have better researches on the heat produced by burning the food, that these quantities will also be more equal than they were found to be by Dulong and Desprez.

Now, if the body be not reposing, but if muscular exertion take place, then also mechanical work is done. The mechanical work is very different, according to the different kinds of muscular exertion. If we walk only on a plane surface, we must overpower the resistance of friction and the resistance of the air; but these resistances are not so great that the work which we do by walking on a plane is of great amount. Our muscles can do work in very different ways. By the researches of Mr. Redtenbacher, the Director of the Polytechnic School of Carlsruhe, it is proved that the best method of getting the greatest amount of work from a human body is by the treadmill, that is, by going up a declivity. If we go up the declivity of a hill we raise the weight of our own body. In the treadmill the same work is done, only the mill goes always down, and the man on the mill remains in his place.

Now, we have researches on the amount of air which is taken in and of carbonic acid given out during such work in the treadmill, made by Dr. Edward Smith. He found that a most astonishing increase of respiration takes place during such work. Now you all know that if you go up a hill you are hindered in going too fast by the great frequency and the great difficulty of respiration. This, then, becomes far greater than by the greatest exertion of walking on a plane, and really the difficulty is produced by the great mechanical work which is done in the same time. Now, partly from the experiments of Dulong and Desprez, and partly from the experiments of Dr. Edward Smith, we can calculate that the human body, if it be in a reposing state, but not sleeping, consumes so much oxygen, and burns so much carbon and hydrogen, that during one hour so much heat is produced that the whole body, or a weight of water equal to the weight of the body, would be raised in temperature one degree and two-tenths Centigrade (two degrees and two-tenths Fah.). Now Dr. Edward Smith found that, by going in the treadmill at such a rate, that, if he went up a hill at the same rate, he would have risen during one hour 1712 feet; that, during such a motion, he exhaled five times as much carbonic acid as in the quiet state, and ten times as much as in sleeping. Therefore, the amount of respiration was increased in a most remarkable way. If we now calculate these numbers we find that the quantity of heat which is produced during one hour of repose is one degree and two-tenths Centigrade, and that these are nearly equivalent to rising 1712 feet; so that, therefore, the amount of mechanical work done in a treadmill, or done in ascending a hill at a good rate, is equivalent to the whole amount of heat which is produced in a quiescent state. The whole amount of the decomposition in the living body is five times as great as in a reposing and wakeful state. Of these five quantities, one quantity is spent for mechanical work, and four-fifths remain in the form of heat. Always in ascending a hill, or in doing great mechanical work, you become hot, and the production of heat is extremely great, as you well know, without making particular experiments. Hence you see how much the decom-

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position in the body is increased by doing really mechanical work.

Now these measurements give us another analogy. We see that in ascending a mountain we produce heat and mechanical work, and that the fifth part of the equivalent of the work which is produced by the chemical process is really gained as mechanical work. Now, if we take our steam-engine, or a hot-air engine, or any other engine which is driven by heat in such a way that one body is heated and expands, and by the expansion other bodies are moved,—I say, if we take any thermo-dynamic engine, we find that the greatest amount of mechanical work which can be gained by chemical decomposition or chemical combination is only an eighth part of the equivalent of the chemical force, and seven-eighths of the whole are lost in the form of heat; and this amount of mechanical work can only be gained if we have the greatest difference of temperature which can be produced in such a machine. In the living body we have no great difference of temperature; and in the living body the amount of mechanical work which could be gained if the living body were a thermo-dynamic engine, like the steam-engine or the hot-air engine, would be much smaller than one-eighth. Really, we find from the great amount of work done, that the human body is in this way a better machine than the steam-engine, only its fuel is more expensive than the fuel of steam-engines.

There is another machine which changes chemical force into mechanical power; that is, the magneto-electric machine. By these magneto-electric machines a greater amount of electrical power can be changed into mechanical work than in our artificial thermo-dynamic machines. We produce an electric current by dissolving zinc in sulphuric acid, and liberating another oxidizable matter. Generally it is only the difference of the attraction of zinc for oxygen compared with the attraction of copper or nitrous acid for oxygen. In the human body we burn substances which contain carbon and hydrogen, and therefore the whole amount of attraction of carbon and hydrogen for oxygen is put into action to move the machine; and in this way the power of the living body is greater and more advantageous than the power of the magneto-electric machine.

Let us now consider what consequences must be drawn when we find that the laws of animal life agree with the law of the conservation of force, at least as far as we can judge at present regarding this subject. As yet we cannot prove that the work produced by living bodies is an exact equivalent of the chemical forces which have been set into action. It is not yet possible to determine the exact value of either of these quantities so accurately as will be done ultimately; but we may hope that at no distant time it may be possible to determine this with greater accuracy. There is no difficulty opposed to this task. Even at present I think we may consider it as extremely probable that the law of the conservation of force holds good for living bodies.

Now we may ask, what follows from this fact as regards the nature of the forces which act in the living body?

The majority of the physiologists in the last century, and in the beginning of this century, were of opinion that the processes in living bodies were determined by one principal agent which they chose to call the "vital principle." The physical forces in the living body they supposed could be suspended or again set free at any moment, by the influence of the vital principle; and that by this means this agent could produce changes in the interior of the body, so that the health of the body would be thereby preserved or restored.

Now the conservation of force can exist only in those systems in which the forces in action (like all forces of inorganic nature) have always the same intensity and direction if the circumstances under which they act are the same. If it were possible to deprive any body of its gravity, and afterwards to restore its gravity, then, indeed, we should have the perpetual motion. Let the weight come down as long as it is heavy; let it rise if its gravity is lost; then you have produced mechanical work from nothing. Therefore this opinion that the chemical or mechanical power of the elements can be suspended, or changed, or removed in the interior of the living body, must be given up if there is complete conservation of force.

There may be other agents acting in the living body, than those agents which act in the inorganic world; but those forces, as far as they cause chemical and mechanical influences in the body, must be quite of the same character as inorganic forces, in this at least, that their effects must be ruled by necessity, and must be always the same, when acting in the same conditions, and that there cannot exist any arbitrary choice in the direction of their actions.

This is that fundamental principle of physiology which I mentioned in the beginning of this discourse.

Still at the beginning of this century physiologists believed that it was the vital principle which caused the processes of life, and that it detracted from the dignity and nature of life, if any body expressed his belief that the blood was driven through the vessels by the mechanical action of the heart, or that respiration took place according to the common laws of the diffusion of gases.

The present generation, on the contrary, is hard at work to find out the real causes of the processes which go on in the living body. They do not suppose that there is any other difference between the chemical and mechanical actions in the living body, and out of it, than can be explained by the more complicated circumstances and conditions under which these actions take place; and we have seen that the law of the conservation of force legitimizes this supposition. This law, moreover, shows the way in which this fundamental question, which has excited so many theoretical speculations, can be really and completely solved by experiment.

ORIGINAL COMMUNICATIONS.

ON DYSMENORRHŒA AND STERILITY.

By JOHN COGHLAN, M.D.

During the past few months I have been very successful in relieving some cases of dysmenorrhœa, by incising the os and cervix uteri, and as my mode of performing this operation is different from that usually adopted, I think it well to point out to the Profession what I consider to be its advantages over the previous modes of proceeding. Dysmenorrhœa depending on mechanical constriction of the cervix uteri, I believe to be much more frequent than some of our writers on the subject would lead us to suppose, while I consider the pure neuralgic form of the disease to be very rare. In those cases where we find obstruction at the cervix uteri, and that great nervous susceptibility exists at the same time, we are sure to have uterine and ovarian congestion, and these causes acting and reacting one on the other, produce the great amount of suffering which we find in bad cases of dysmenorrhœa. It might be thought from a patient passing an occasional menstrual period without pain, that no mechanical obstruction existed, but from careful observation I have good reason to believe that we are not justified in this conclusion. For should the subject of dysmenorrhœa, at the accession of a menstrual period, be favourably situated for the gradual secretion of the fluid, and the prevention of local congestion (confined to bed, for example) it is by no means unlikely that she may pass the period with little or no pain, though more or less of mechanical constriction of the cervix uteri, when brought into play under ordinary circumstances, may be the whole source of her sufferings. Having entertained these opinions for some years, I have from time to time treated bad cases of dysmenorrhœa by endeavouring to dilate the os and cervix uteri by means of bougies and plugs of compressed wood. These latter, from their swelling by the absorption of moisture from the parts, produced rather satisfactory results for a time, but these results were not permanent, and the same proceeding had to be repeated. I never hesitate in my practice to make a vaginal examination, or use the speculum, when I consider it necessary, but I have an utter objection to have to repeat it day after day, as in dilating the cervix uteri by bougies, for in addition to its being disagreeable to our patients, I think it has a tendency with most women to diminish their self-respect. For these reasons I have given up the practice of dilatation for a considerable time.

About eight months ago, a woman, about twenty-six years old, suffering from a very bad form of dysmenorrhœa, applied to me for relief. She stated that she had been a great sufferer from her first menstrual period up to the present, in fact, that from that one cause she had spent a life of misery. She had been four years married, had no children, and her suffering at the menstrual period had become much increased

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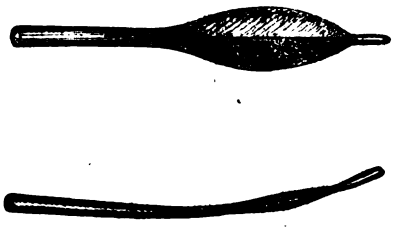
since her marriage. On examination I found the os uteri much enlarged, and presenting a flat disk nearly an inch and a-half in diameter, instead of its usual rounded form, the external orifice was small, and the constriction was so great at the cervix that I could not pass a No. 1 flexible bougie. At a subsequent examination I carefully, but with some difficulty, passed the stylet of a catheter into the cavity of the uterus. I then passed into the cervix a small plug of pine-wood compressed by drawing it through five or six holes of a wire draw plate, and thus gained some amount of dilatation of the canal. On the following day I incised the os and cervix by means of the instrument represented below. Having perfected the incision, I took a piece of sheet lead rolled out so thin as to be very light and flexible, but sufficiently thick to retain its shape, about an inch long, and three-fourths of an inch wide, rolled it in its width into a small tube and turned the edges of the ends slightly out into a lip. I introduced this tube into the incision, and then by passing the blades of a long thin dressing forceps into the tube, and opening them a little, I dilated it to the full extent of the incision. On examination two days after, I found the tube in its place, I had to replace it twice within the following week, from having fallen out, but recovery took place without any bad symptoms, I then lost sight of my patient till about a fortnight ago, when I learned that at the next menstrual period she had considerable pain, but so little in comparison to her former sufferings, that she had not recourse to the opiates which she had been accustomed to use; since then the pain has been gradually diminishing, she had not then menstruated for seven weeks, and I think it probable that she is pregnant.

Front and Profile View of Dr. Coghlan's Probe-pointed Metrotome.



This instrument consists of a central blunt or probe-point less than a quarter of an inch long, and about the thickness of a No. 1 bougie, and proceeding from this are two cutting sides about three-eighths of an inch wide. The whole instrument, including the handle, is about eight and a-half inches long, and is slightly curved for three inches from the point, to correspond with the oblique position of the uterus. The advantage of the instrument is that, guided by the probe-point, we are sure with ordinary care to have our incision right into the uterine cavity, and perfectly central, and by using instruments of different widths we can have our incision of the exact extent we desire. By means of the leaden tube we get rid of the disadvantage of having an absorbent, offensive, and irritating plug, and of the necessity for frequent examinations.

Wexford.

ON

PARASITIC AFFECTIONS OF THE SKIN.

By T. McCALL ANDERSON, M.D.

Fellow of the Faculty of Physicians and Surgeons of Glasgow, &c.

No. VIII.

HAVING completed the account of the various fungous growths which are deposited on the skin and hair, and of the diseases produced by them, I pass now to the consideration of those *animal* parasites which attack the cutaneous envelope. The diseases produced by these insects are much more thoroughly understood than are those due to the presence of fungi, and yet there are many points of great interest in connexion with them, to which it will be my endeavour to direct attention.

The parasitic affections of the skin, due to the presence of animal parasites, are two in number :—1. Phthiriasis. 2. Scabies.

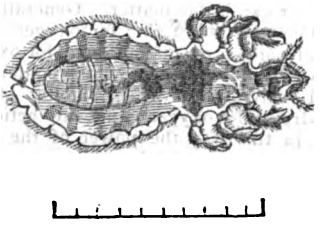
PHTHIRIASIS.

Läusesucht; Maladie pédiculaire (disease due to the presence of pediculi, lice).

There are three kinds of lice which attack the skin of man. One of these is met with on the hair of the head alone—the *pediculus capitis*. Another upon the remaining hairy parts of the body, but especially on the pubis; hence its name *pediculus pubis*. While the third commits its ravages on the non-hairy parts, and is therefore called the *pediculus corporis*. It is indeed very curious that these three species should live in such close proximity to one another, and yet, in no case, leave their own preserves for the purpose of poaching on that of their neighbours. No explanation has yet been given of this circumstance, and I do not pretend to solve the difficulty. One can understand why one insect should prefer hairy, and another non-hairy parts, but not why one pediculus should find its appropriate soil on the hair of the head alone, while the pediculus pubis attacks all hairy parts except the head.

The pediculi attacking the skin of the body (pediculi corporis) are the most important of these in a clinical point of view; for, although they often exist and live at the expense of the skin without producing any manifest eruptions, still, when present in great numbers, and especially when their ravages have been continued for some time, they give rise to a disease usually denominated Prurigo pedicularis.

FIG. 12.



100th parts of an inch.

FIG. 12.—Pediculus corporis (female).

The body louse (See Fig. 12) (Pediculus corporis—pediculus vestimentorum—Kleiderlaus) is whitish in colour, and varies from half-a-line to two lines in length. The head is irregularly oval in shape, jointed to the body, and provided with antennæ, one on each side, each having five joints, and covered with minute hairs. A number of such hairs are also seen at the edges of the head. The body is elongated; the abdominal portion very broad, its margins lobulated and covered with little hairs. From the thoracic portion, which is comparatively very narrow, there proceed six legs, three on each side. The legs are hairy, provided with four joints, and terminate in claws. This insect secretes itself among the folds of the clothing, and only sallies forth from thence for the purpose of obtaining the means of existence at the expense of the skin of the wearer; so that when a person so affected is naked, few, if any, lice are to be seen on his body, although innumerable multitudes are to be seen on his clothes. The skin of the person so attacked becomes extremely itchy, the severity of the itching depending on the number of insects, and on the degree of sensibility of the cutaneous envelope. The itching induces the patient to scratch himself, at first occasionally and slightly, afterwards with fury and without ceasing. First of all the marks of his nails are seen on the skin in the form of white, or red, or excoriated streaks, the excoriations being studded with droplets of coagulated blood. In addition to this papules form, the summits of which are torn off by the nails, and little drops of serum or of blood are exuded and coagulate upon them. A pruriginous eruption is, in fact, produced by the scratching. If unrelieved, pustules may form, and even, by the irritation, the neighbouring glands may become enlarged. The eruption of prurigo is met with in greatest abundance on the neck, back, and shoulders, and on those parts of the body which are tightly embraced by the clothing—a point to be attended to—as it is highly characteristic of the affection. The reason why these parts are selected is obvious;

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for the articles of clothing are in these situations gathered into folds, between which the lice are embedded, and where they deposit their eggs (or nits as they are called), which have the appearance of little crystalline and shining, or yellow and opaque bodies. But, although the skin is most affected in these situations, any covered portion of the body may give evidence of the eruption, for not only may the lice attack any part, but the patient may scratch parts not attacked, owing probably to a reflex itchy sensation. In cases of old standing the continued irritation gives rise to continued congestion, and this leads to infiltration of the subcutaneous tissue and increased deposit of pigment, so that the skin becomes much darker, rougher, and thicker, than is natural, the extent of these changes depending on the severity and duration of the disease.

Very erroneous notions often prevail with regard to the above affection, and for this reason, that lice often appear on the skins of persons attacked by loathsome cutaneous eruptions, the lice being in these case merely *attracted* by it, whereas, in the true prurigo pedicularis, it is the lice which *occasion* the cutaneous eruption. Of course the irritation of the lice and the consequent scratching may give rise to eczematous and other constitutional affections; but these must be looked upon as complications of the disease, and not as part of the disease itself. A prurigenous eruption occurs on the skins of all persons who are attacked for any length of time by lice when these are in abundance, while an eczema will only appear in the case of those so predisposed, and is, therefore, absent in the majority of cases. Eczema is the disease which is most likely to be called forth by the irritation, but there are many others which may be thus made to manifest themselves on the skin, such as psoriasis lichen, syphilitic eruptions, etc. It is on the skins of persons who are liable to these constitutional skin diseases— and more especially to watery eruptions—that the lice seem to find a highly favourable soil, and to multiply with a rapidity which is perfectly frightful. An interesting case is reported by Bryant as having occurred in Guy's Hospital. This patient had been a governess, and was about thirty years of age; the whole of her body was literally covered with lice, and the irritation and scratching, so occasioned, gave rise to excoriations and to the formation of crusts. On admission into the Hospital she was put into a warm bath, and all her clothes were taken away. Every precaution was taken to remove all the insects, but two hours afterwards her body was again covered with them, although she lay in a clean bed. She was again thoroughly washed, but the vermin re-appeared immediately, and all the remedies which were employed were useless (a). Bernard Valentin gives the history of a man of forty years of age, who was troubled with insupportable itching over the whole body, and his skin was covered with tubercles. The Physician in attendance, being unable to assuage the itching, made an incision into one of the small tumours, and there appeared immediately, neither blood, nor water, nor pus, but such an enormous quantity of lice of different forms and sizes that the patient almost died of fright. The same operation and with similar results was performed on the other tubercles (b). Accounts are also given of lice having been found not only beneath the skin but even underneath the bones of the skull and embedded in the brain-substance; but I do not myself believe in such occurrences.

Instances such as these are made use of in support of the theory of the spontaneous generation of lice, of which Devergie is a most strenuous supporter. I cannot, however, regard this theory in any other light than as an ingenious way of hiding our own ignorance. In cases such as that in Guy's Hospital, there can be no doubt that some of the insects and their eggs remained adhering to the skin, probably hidden by the crusts, and the reason why they sometimes multiply with such rapidity is, that they find on the skin of the afflicted person a soil highly favourable to their development.

Causes.—The pediculus corporis is the sole exciting cause of the form of prurigo above described, but it must be borne in mind that prurigo is also produced by other causes, as for instance, by the acarus scabiei, as we shall see hereafter. There can be no doubt that dirtiness is the most powerful predisposing cause, for lice are rarely met with amongst the higher classes. Those who live in misery, who are accustomed to bad food and impure air, as well as those whose bodies are diseased, are also selected by this animal.

Persons who are already affected with cutaneous, and especially secreting eruptions, as eczema, are extremely liable to be infested by them, as they evidently thrive better on morbid than on healthy secretions. People of high rank who have been attacked by lice must ascribe the affliction to having eruptions of this kind, or to their being in a bad state of health, which attracted the lice.

Amongst the many extravagant accounts of their ravages, I never read of one in which they attacked perfect cleanly and healthy people except in a partial and transient manner. The *Diagnosis* of prurigo pedicularis is quite easy. The lice may at once be detected, if not on the body, at all events, on the clothes of the patient especially between the folds, where nits are always to be met with in great abundance. The situation of the pruriginous eruption is also characteristic, being met with principally on the neck, back, and shoulders, and on those parts which are most tightly embraced by the dress.

(To be continued.)

(a) Gazette Médicale du 12 Mai, 1838.

(b) Dictionnaire des Sciences Médicales, No. 42, p. 7.

PRACTICAL HINTS ON THE ACCOMMODATION OF THE EYE, ITS ANOMALIES AND THEIR TREATMENT.

By Mr. J. SOELBERG WELLS.

(Continued from page 492.)

PRESBYOPIA.

The presbyopic patient (who is generally above forty years of age) complains that his sight, particularly in the evening, is beginning to fail him for near objects, small print, etc.; at a distance he can, however, see perfectly. In order to see minute objects more distinctly, he removes them further from the eye, or even, perhaps, seeks a bright light, so as to diminish the circles of dispersion upon the retina by narrowing the area of the pupil. But as, on account of the distance at which these fine objects are held, their retinal images are very small, he will soon experience a commensurate difficulty in clearly distinguishing them, and feel the want of spectacles.

In pure presbyopia the far point is at a normal distance from the eye, parallel rays are united upon the retina, and neither concave nor convex glasses (even after the instillation of atropine) at all improve distant vision. The eye is neither myopic nor hypermetropic. There is in fact no anomaly of refraction, but only a narrowing of the range of accommodation; the near point is removed too far from the eye, and hence the difficulty of accurately distinguishing small objects.

Presbyopia is, however, often accompanied by amblyopia (weakness of sight) and the latter is sometimes mistaken for it; this may the more easily occur, as the amblyopic patient also cannot see small objects distinctly, and as convex glasses improve his vision by affording him larger retinal images. In a purely presbyopic eye (which is free from amblyopia) we should, by means of the proper convex glass, be able to restore a normal sharpness of vision and a normal range of accommodation. With this glass the patient should be able to read No. 1 of Jäger at a distance of about 12″. If he cannot do this, but only perhaps decipher Nos. 4 or 6, or if he is obliged to hold the object very near his eye (nearer than is warranted by its size), he is not only far-sighted but also amblyopic. It may therefore be laid down as a practical rule that the nearer we can approximate, by means of convex glasses, the vision and range of accommodation of a presbyopic eye to that of a normal one, the less is the impairment of sight due to amblyopia, and *vice versâ*.

Donders has found that in the normal (emmetropic) eye the near point gradually recedes, even from an early age, further and further from the eye, and that, in consequence of this, vision of very minute objects becomes proportionately more and more difficult. This recession of the near point commences already about the tenth year, and progresses regularly with increasing age. At forty it lies at about 8″ from the eye, at fifty at 11″—12″ and so on. In the normal eye no inconvenience or annoyance is experienced from this recession till about the age of forty or forty-five.

This change in the position of the near point is met with in

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all eyes,—the emmetropic, the hypermetropic, and the myopic (if the latter remains healthy).

But the far point also begins in the normal eye to recede somewhat about the age of fifty, so that the eye then becomes slightly hypermetropic (distant vision is then improved by convex glasses). At seventy or eighty years of age, the hypermetropia may = $\frac{1}{24}$, *i.e.*, the patient can see distinctly at a distance with a convex glass of 24″ focus. Donders says that this hypermetropia, which is at first only acquired, may afterwards become absolute; so that the patient is not only unable to accommodate for divergent, but even for parallel rays.

Donders thinks that the recession of the near point from the eye, and the consequent narrowing of the range of accommodation, is due to a change in those parts within the eye which are passively changed during the act of accommodation, and not to an alteration in those which through their activity bring about the accommodation. For the ciliary muscle, the active agent of accommodation, is normal. Whereas the passively changed organ of accommodation, the crystalline lens, gradually becomes more and more firm with advancing years, and in consequence of this increased firmness, the same amount of muscular action cannot produce the same change in the form of the lens as formerly.

At first we, of course, experience no inconvenience from this gradual recession of the near point; we do not, in fact, notice it until the distance is so considerable that we cannot easily distinguish small objects. When are we, then, to consider an eye presbyopic? Donders thinks this should be done as soon as the near point has receded further than 8″ from the eye: for as soon as this is the case, patients generally begin to complain that continued work at small objects has become irksome and fatiguing. We, however, sometimes meet with persons with very strong sight, who can read and write for hours without experiencing any inconvenience, even although their near point may be at 11″ — 12″ from the eye. But these cases are exceptional. Let us, therefore, with Donders, consider presbyopia to begin when the near point is removed further than 8″ from the eye.

The degree of presbyopia may, according to Donders, be easily found thus:—If p > 8 = 8 + n, the presbyopia, Pr = $\frac{1}{8+n} - \frac{1}{8}$.

This simply means that we are to deduct the near point (8″) at which we consider presbyopia to commence, from the presbyopic near point. If, for instance, the latter lies at 12″, it would be $\frac{1}{12} - \frac{1}{8} = -\frac{1}{24}$. Pr = $-\frac{1}{24}$. Again, if it lies at 16″ it is $\frac{1}{16} - \frac{1}{8} = -\frac{1}{16}$. Pr = $-\frac{1}{16}$. We have, at the same time, found the number of the convex glass, which would bring the near point back again to 8″. In the first case, it would be convex 24; in the last, convex 16.

The reader will have been struck by the fact, that if we consider an eye presbyopic when the near point is removed further than 8″ from the eye, not only the emmetropic (normal), but even the myopic or hypermetropic eye may suffer from presbyopia. If, for instance, a short-sighted person suffers from a myopia = $\frac{1}{16}$ (his far point lying at 16″ from the eye), and his near point lies at 12″, he is both short and long sighted. His myopia = $\frac{1}{16}$, his presbyopia = $\frac{1}{24}$. This cannot, of course, occur when the myopia is considerable, *e.g.*, $\frac{1}{8}$ (the far point lying at 6″ from the eye).

In hypermetropia the same thing may happen.

If with the convex glass—which neutralises the hypermetropia, which renders the hypermetropic eye capable of uniting parallel and divergent rays upon the retina—the near point lies at 12″ from the eye, the patient is not only hypermetropic, but also presbyopic. He will require two different sets of convex spectacles, one pair which enable him to see from 12″ to infinity, and another stronger pair which will bring his near point nearer than 12″.

The range of accommodation of a presbyopic eye is easily found by the formula A = $\frac{1}{p} - \frac{1}{r}$. If such an eye can see from 10″ to infinity (∞), its near point (p) will lie at 10″, its far point (r) at ∞, its range of accommodation, therefore, = $\frac{1}{10} - \frac{1}{\infty} = \frac{1}{10}$. A = $\frac{1}{10}$.

There can be no question as to the advisability and necessity of affording far-sighted persons the use of spectacles. They should be furnished with them as soon as they are in the slightest degree annoyed or inconvenienced by the presbyopia. Some Medical men think that presbyopic patients should do without spectacles as long as possible, for fear the eye should even at an early period get so used to them as soon to find them indispensable. This is, however, an error, for if such persons are permitted to work without glasses we observe that the presbyopia soon rapidly increases.

It has been already stated how the proper glasses may be readily calculated. If p (the near point) lies 16″ from the eye, Pr = $\frac{1}{16} - \frac{1}{8} = -\frac{1}{16}$. A convex glass of 16″ focus will bring the near point back again to 8″ from the eye. We must generally, however, give somewhat weaker glasses, because, on account of the greater convergence of the optic axes, the near point will through these glasses (convex 16) be in reality brought nearer than 8″. Late in life, when there is some diminution in the acuteness of vision (Schschärfe), Donders thinks that the near point should sometimes be brought even to 6″ or 7″, and that it should be brought the nearer the greater the range of accommodation.

He further thinks that when no hypermetropia exists, the weakest glasses with which No. 1 of Jäger can be distinctly and easily read at about 12″ distance may generally be given.

In choosing spectacles for far-sighted persons we must also be particularly guided by the range of their power of accommodation. If this is good, we may give them glasses which bring their near point to 8″; but if it is much diminished weaker glasses should be chosen, so that it may lie at 10″—12″ from the eye.

In conclusion, I may be allowed to call the reader's attention to the very important fact that a very rapid increase of presbyopia is one of the premonitory symptoms of glaucoma. If, therefore, a patient tells us that his far-sightedness has rapidly increased within a few months, so that he has had repeatedly to change his spectacles during that time for stronger and stronger ones, our suspicions should be aroused, and we should without fail examine him as to the presence of other premonitory symptoms of glaucoma,—*e.g.*, rainbows around the candle, periodical obscurations, etc. Von Graefe thinks that this rapid increase of presbyopia is most likely due to an increase of intraocular pressure and flattening of the cornea.

16, Savile-row, W.

(To be continued.)

REPORTS OF HOSPITAL PRACTICE

IN

MEDICINE AND SURGERY.

CONDUCTED BY

JONATHAN HUTCHINSON,

Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital,

AND BY

J. HUGHLINGS JACKSON, M.D.

STATISTICAL REPORT OF OPERATIONS PERFORMED DURING THE YEAR 1860.

THE subjoined Report comprises the cases supplied by the following Provincial Hospitals:—

The Derby, Leeds, Leicester, Sussex County, Addenbrooke's (Cambridge), Nottingham, Chester, Cheltenham, West Norfolk and Lynn, Sheffield, Hull, York, Northampton, Cumberland, and Gloucester.

OPERATIONS FOR REMOVAL OF MALIGNANT TUMOURS.

Case 1.—The Leeds General Infirmary: Mr. Teale.—A man, aged 74. Rodent ulcer of seventeen years' duration on the left ala of the nose. Removal. Recovery. *Case* 2.—The Leicestershire Infirmary: Mr. Macaulay.—A man, aged 55. Seven months before the operation he noticed a swelling on the back of his thigh, about twice the size of a hen's egg. It was very painful. At the time of the operation it was the size of two fists, ovoid, moveable, very tense, and faintly fluctuating; the skin, and the glands in the groin were not affected. It was on March 27 punctured with a trocar. Yellow viscid glairy fluid like that from a ganglion escaped. March 30.—It was laid open, and found to be of honeycomb structure, numberless loculi, more or less filled with the fluid above mentioned. It was overlaid by the hamstring muscles, and involved the sciatic nerves. The whole of the

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mass could not be got out. Under the microscope—"The white membranous parts consisted of well marked wavy fibres entirely. The intervening jelly-like substance consisted of a few wavy fibres and a few nucleated fibres, numerous granules, some badly-formed cells with granular contents and bright granular-like fat." The wound suppurated very freely, and the growth soon began to re-appear, and by May 1st it attained the same size as before the operation. It was now sprouting out granulations. The pain he suffered was frightful. Opiates were given freely. On May 22 he left the Hospital at his own request. There was then an immense mass, reaching the whole length of the thigh. He died about three weeks later. *Case* 3.—The Cheltenham General Infirmary.—A woman, aged 23. Enlarged nympha, preventing walking, of some months' duration. Excision. Recovery. *Case* 4.—The Liverpool Royal: Mr. Bickersteth.—A man, aged 33. A fibrous tumour about the size of an orange removed from over the sacrum. Recovery.

Epithelial Cancer.—Case 5.—The Sussex County: Mr. Blaker.—A man, aged 57. Very extensive epithelial cancer of the lower lip. Duration two and a-half years. Glands not affected. The wound healed well, the cicatrix being scarcely visible. *Case* 6.—The Sussex County: Mr. Blaker.—A man, aged 57. Epithelial cancer of the lower lip. He was not a smoker. Excision. Recovery. *Case* 7.—The Gloucester General Infirmary: Mr. Wilton.—A man, aged 59. Epithelial cancer of the lower lip, of fourteen months' duration. Excision. Recovery. *Case* 8.—The Gloucester General Infirmary: Mr. Lovegrove.—A man, aged 41. Epithelial ulceration of part of the lower and upper lip and angle of the mouth. Duration four years. Excision. When the wound had nearly healed there appeared at one part of the cicatrix an ulcerated granulating edge. *Case* 9.—The Gloucester General Infirmary: Mr. Lovegrove.—A man, aged 71. Epithelial ulceration of the lower lip of twelve months' duration. Nearly the whole of the lower lip was removed, and the wounded surface healed. *Case* 10.—The York County Hospital: Mr. Husband.—A man, aged 70. Cancer of the lip. Excision. Recovery. *Case* 11.—The Derby Infirmary: Mr. Johnson.—A man, aged 50, a smoker. Epithelial cancer involving the whole of the lower lip. Excision. Recovery. *Case* 12.—The Sussex County Hospital: Mr. Blaker.—A man, aged 42. Epithelial cancer of the lower lip. Excision. Recovery. *Case* 13.—The Leeds General Infirmary: Mr. Teale.—A man, aged 50. A small epithelial cancer of the lower eyelid. After removal the wound healed very rapidly. *Case* 14.—The Leeds General Infirmary: Mr. Smith.—A man, aged 75. A large epithelial growth removed from the angle of the mouth. Recovery. *Case* 15.—The Leeds General Infirmary: Mr. Hey.—A man, aged 65. A small epithelial cancer of the lower lip. Excision. Recovery. *Case* 16.—The Leeds General Infirmary: Mr. Hey.—A man, aged 60. A small epithelial cancer of the lower lip. Excision. Recovery. *Case* 17.—The York County Hospital: Mr. Keyworth.—A woman, aged 63. Excision of a small epithelial cancer from the parotid region. Recovered. *Case* 18.—The Leeds General Infirmary: Mr. Teale.—A man, aged 47. Removal of an epithelial growth of the size of a walnut in the lower lip. Recovery. *Case* 19.—The Leeds General Infirmary: Mr. Smith.—A man, aged 50. A large epithelial cancer of the lower lip and cheek. Recovery. *Case* 20.—The Leeds General Infirmary: Mr. Teale.—A man, aged 54. Removal of epithelial cancer occupying anterior half of tongue on one side. Glands under the jaw enlarged. Recovery. *Case* 21.—The Leeds General Infirmary.—A man, aged 67. A small epithelial cancer on the side of the tongue. Recovery. *Case* 22.—The West Norfolk and Lynn Infirmary: Mr. Kendall.—A man, aged 53. A great smoker. Epithelial cancer of the lip. Excision. Recovery.

REMOVAL OF NON-MALIGNANT GROWTHS.

Case 1.—The Sussex County Hospital: Mr. Blaker.—A man, aged 57. Recurrent fibroid tumour over the right buttock, of five months' duration. It dated from a blow. Removal. Recovery. *Case* 2.—The Chester Infirmary: Mr. Brittain.—A healthy-looking, florid countryman, aged 20. A very large warty tumour occupying and concealing the whole perineum from the scrotum to three or four inches posterior to the anus, and almost as large and prominent as a child's head. There was some previous history of gonorrhœa as well as of primary syphilitic sores. The growth first threatened a year ago, and in June last an unsuccessful attempt at removal by ligature was made elsewhere. The ecraseur was equally inefficacious. Chloride of zinc and nitric acid were alike ineffectual and unsatisfactory. The mass was therefore (on October 12) removed with the knife, and the exposed surface freely cauterised with the iron, thus destroying any remaining diseased structure, and at the same time arresting the free hæmorrhage. On December 5, a disposition to a recurrence was similarly treated, and the man was discharged on January 1st, 1861; perfectly cured. *Case* 3.—The Leeds General Infirmary: Mr. Teale. A woman, aged 37. Removal of an adenocele the size of a pigeon's egg over the parotid gland. Recovery. *Case* 4.—The Leeds General Infirmary. A woman, aged 24. Removal of a fibro-nucleated tumour from the outer side of thigh. *Case* 5.—The Derby Infirmary: Mr. Gisborne.—A male. Cystic tumour on the side of the nose. Excision. Recovery. *Case* 6.—The General Infirmary, Gloucester: Mr. Lovegrove.—A woman, aged 29, A pendulous fibro-plastic tumour attached to external genital organs four years. Recovery. *Case* 7.—The Gloucester General Infirmary: Mr. Wilton.—A woman, aged 43. An enchondromatous tumour of three years' duration removed from the cartilage of the lower eyelid. Recovery. *Case* 8.—The Gloucester General Infirmary: Mr. Wilton. A man, aged 74. A fibrous tumour removed from the buttock. *Case* 9.—Addenbrooke's Hospital (Cambridge): Dr. Humphry.—A lad, aged 12. Enchondroma of the metacarpal bone of the thumb, about the size of a small orange. It had been growing seven years. Removal. Recovery. *Case* 10.—The York County Hospital: Mr. Husband. Removal of tumour from upper lip. Recovery.

OPERATIONS FOR THE REMOVAL OF TUMOURS FROM THE BREAST.

Case 1.—The Liverpool Royal Infirmary: Mr. Bickersteth.—A woman, aged 40. Scirrhus of the breast of six months' duration. Excision, November 1860. Recovered, but the disease re-appeared in February, 1861. *Case* 2.—The Liverpool Royal Infirmary: Mr. Long.—A woman, aged 50. Scirrhus of the breast. She had a severe attack of pneumonia after the operation. Recovered. *Case* 3.—The Leeds General Infirmary: Mr. Smith.—A married woman, aged 63. The whole breast was involved in scirrhus of two years' growth. No glands were enlarged. The general health appeared good. Her recovery was very rapid. *Case* 4.—The Cumberland Infirmary: Mr. Page.—A woman, aged 46. Cancer of the breast of eight months' duration. Excision. Recovery. *Case* 5.—The Leeds General Infirmary: Mr. Hey. A married woman, aged 50. Removal of a scirrhus tumour the size of an egg, February, 1860. In December a small nodule which had appeared was also removed. Recovery. *Case* 6.—Addenbrooke's Hospital (Cambridge): Dr. Humphry.—A woman, aged 56. Ulcerated scirrhus of the right breast. Nineteen years before, "a lump formed" below the nipple. It remained quiescent until a year ago, when she hit it against the handle of a door. After this accident it increased rapidly. Glands not enlarged. Excision. Recovery. *Case* 7.—The York County Hospital: Mr. Keyworth.—A woman, aged 44. Scirrhus tumour of the breast. Excision. Recovery. *Case* 8.—West Norfolk and Lynn Hospital: Mr. Kendall. A woman, aged 27. Tumour of the breast of two years' duration. Excision. Recovery. *Case* 9.—West Norfolk and Lynn Hospital: Mr. Kendall.—A married woman, aged 40. Scirrhus of the breast. Excision. Recovery. *Case* 10.—Addenbrooke's Hospital (Cambridge): Dr. Humphry and Mr. Lestourgeon.—A healthy-looking woman, aged 43. Her left breast had been removed by Dr. Humphry in August, 1859, for scirrhus. In June, 1860, a returned mass of scirrhus near the cicatrix was removed by Mr. Lestourgeon. December, 1860: Return of disease in the cicatrix of the last operation. Enlarged glands in axilla. Dr. Humphry removed the scirrhus mass and the enlarged glands up to the level of the clavicle. Made an out-patient February 1, 1861. *Case* 10.—Addenbrooke's Hospital (Cambridge): Dr. Humphry.—Scirrhus of the left breast. Enlargement of one or two glands in the axilla. Excision of the breast and removal of the glands. Recovery. *Case* 11.—Addenbrooke's Hospital (Cambridge): Mr. Lestourgeon.—A woman, aged 35. Scirrhus of the right breast. Enlarged glands in the axilla. Removal of the breast and of the glands. Recovery. *Case* 12.—The Leicester Infirmary: Mr. Benfield.—A woman, aged 47. Cystic

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sarcoma, as large as a child's head, of the right breast of five years' duration. Excision. Recovery. *Case* 13.—The Hull Infirmary: Dr. King.—A widow, aged 48, tolerably healthy-looking. Tumour (innocent) of the breast the size of two fists. Duration, six months. Excision. Recovery. *Case* 14.—The York County Hospital: Mr. Husband.—A woman, aged 54. Scirrhus tumour of the breast. Excision. Recovery. *Case* 15.—The Leicester Infirmary: Mr. Benfield. A woman, aged 47. Small scirrhus of the breast of seven months' duration. Enlarged glands in the axilla. Excision. She recovered well from the operation. She died about four months later. It was reported that she died of hæmoptysis.

NORFOLK AND NORWICH HOSPITAL.

CASES OF EXCISION OF JOINTS.

[Reported by Mr. CHARLES WILLIAMS, House-Surgeon.]

Case 1.—Julia C., aged 19½ years, was admitted under Mr. Nichol's care on March 29, 1856, suffering from disease of the left knee-joint, respecting which she gave the following history:—A year previously she obtained a situation as bar-maid at a public-house in Norwich, and was so extremely hard-worked, that nine months later she experienced pain and uneasiness in the knee; shortly after it began to enlarge; the pain then increased in severity, and she was compelled to go home, where she remained in bed for several weeks, the knee, during this time, getting gradually worse, and when she was admitted into the Hospital at the above date, the joint was in the following condition: It was considerably enlarged, the swelling being greatest above and on each side of the patella. There was a feeling of fluctuation in the joint, pain was constant, and of an aching character, the limb was flexed, and incapable of any degree of motion. Her health was good. Local remedies were resorted to, such as evaporating lotions at first, and, afterwards, counter irritation, Scott's ointment, support by means of splints and bandages, and rest in bed.

Very little improvement resulted from these several forms of treatment. On September 12, 1856, she accidentally fell down and injured her knee. "It became more swollen, exquisitely painful from every movement, and her general health began to decline from the local mischief." Under these circumstances resection of the joint was determined upon and carried into effect on October 11, 1856. "The semilunar incision was adopted; the condyles of the femur, and the articulating surface of the tibia were removed, the tibio-fibular articulation being left untouched. The cartilages were found to be absorbed on the tibia and femur; on the patella not so; the synovial membrane was clipped away, sutures were put in and warm water dressing applied." (a)

It seems that the case progressed satisfactorily for about three months, and that shortly after that period, the knee increased somewhat in size, abscesses slowly formed, and other symptoms of a rekindling of the disease became daily more manifest, so that at the end of six months, it was in such a condition as to defy any further attempts to save it, and as her health was materially suffering, amputation of the thigh in its lower third was performed on July 1, 1857, just eight and a-half months after excision. She made a most rapid recovery, and was dismissed cured on August 7, 1857, and when visited a few weeks since was found to be in robust health.

Case 2.—John B., aged 27, a butler, admitted under Mr. Cadge's care on December 28, 1858, suffering from acute inflammation of his left elbow. He was a tall spare man, of dark complexion, and stated that about eleven months previously he slipped down stairs and struck his elbow with considerable violence against the edge of one of the steps. This injury gave rise to inflammation, which in the course of a few weeks was subdued. Some amount of stiffness was the only unpleasant symptom that remained.

Six weeks previous to admission he was seized with severe pain in the joint, followed by the usual symptoms of inflamed articulations, and with his elbow in this condition he was received into the Hospital.

The arm was placed on an angular splint, leeches and other local remedies were resorted to, but these resources failed to check the progress which the disease was rapidly making towards suppuration. Abscesses formed around the joint and were punctured; a good deal of pus was thus evacuated. The abscesses went on multiplying, and renewed attacks of severe inflammation took place. The patient's health became seriously impaired. His countenance wore an anxious appearance, and much debility was induced by the profuse discharge.

On the seventy-third day after admission chloroform was administered. A single longitudinal incision, about seven inches in length, was made. At the back of the joint, a little to the inner side of the olecranon, the integuments and attachments of muscles were dissected away, and the extremities of the three bones laid bare and removed. There was a large quantity of pus in the joint. The synovial membrane had undergone pulpy degeneration. A good deal of it was cut away. No vessel required to be tied. The edges of the wound were brought together by four points of suture, and the arm placed on a well-padded wooden rectangular splint.

The lower end of the humerus was found to be quite denuded of cartilage, its cancellous texture very hard. Rough and eroded osteophytes existed on the inner and outer condyles, as well as on the olecranon process of the ulna, the sigmoid cavity of which was devoid of cartilage, its cancellous structure firm and deeply ulcerated. The head of the radius was in the same condition. The synovial membrane was converted into a thick pulpy substance of a light brown colour; it completely covered the ends of the bones.

No improvement followed the operation; the elbow slowly increased in size, abscesses were continually forming, the discharge from them and the joint was great. Hectic became established, his system extremely debilitated, and almost worn out by pain. He now solicited to be relieved of his infirmity. Flap amputation through the middle of the arm was performed on the thirty-fifth day after excision.

He now progressed favourably towards recovery, the stump healed well, and he was discharged May 14, 1859.

An examination of the limb discovered a large amount of thick pus in the space formerly occupied by the joint; the synovial membrane was a quarter of an inch in thickness, and had degenerated into that gelatinous material, of a gray colour with white spots in it, described by Sir B. Brodie. There was no attempt at union between the ends of the bones.

Case 3.—Benjamin L., aged 51, farm labourer, admitted under the care of Mr. Cadge, on April 7, 1860, with chronic disease of the left knee.

Six years before admission, without blow or injury, the joint became swollen and painful, and although it remained swelled he was not incapacitated from following his employment until a year and a-half ago, at which time the knee was so tender, hot, and enlarged that he could work no longer; since that period it has been getting gradually worse; his family are very healthy; he never had any illness prior to the commencement of the local disease.

On admission, he was considerably emaciated, subject to night sweats, and had an indifferent appetite. The contour of the knee, in consequence of the degree of tumefaction, was completely lost, its circumference above the patella measured 15 inches, over the middle 16, and below 15. The corresponding points of the opposite limb measured respectively, 13, 14, and 12½ inches. The patella was moveable and thrust forwards and outwards. On viewing the joint in front the outer condyle of the femur appeared more prominent and irregular than the internal one; whilst the inner tuberosity of the tibia projected inwards, and gave the idea of partial displacement. The limb was flexed at an obtuse angle; pressure on any part of the joint gave great suffering. There were no sinuses about the knee.

May 25, 1860.—The patient was placed under the influence of chloroform, and Mr. Cadge proceeded to excise the articulation by making the usual H incision. About 1¼ inches of the lower end of the femur, and an inch of the head of the tibia were removed; the patella was dissected from the flap to which it was attached. The synovial membrane was much thickened, and similar in consistence and colour to ordinary jelly; several portions were cut away with curved scissors. A small quantity of sero-sanguineous fluid existed in the joint; no pus either inside or outside it. The head of the fibula was not interfered with. The edges of the wound were brought together by means of sutures, and the limb placed in an

(a) "Second Memoir on Excision of the Knee-joint," by R. G. H. Butcher, F.R.C.S., etc. 1857. P. 38.

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extended position, on a Macintyre's splint. Free hæmorrhage occurred during the operation.

The end of the femur was found to be almost divested of cartilage, its texture was very dense and deeply eroded, the left condyle was covered with a layer of soft vascular material, continuous with the altered synovial membrane at the margins of the bone. On the piece of tibia, the cartilages were thin, soft, and perfectly loose, beneath them was the same vascular membrane connected with the soft, degenerated synovial membrane which existed in great abundance around the head of the tibia, the osseous structure of which was healthy and deeply grooved. The semilunar cartilages were entirely absorbed. The patella was imbedded in the thickened synovial material, the whole of its cartilage and one-third of its substance had been removed by absorption.

The patient progressed very favourably for three weeks; at the end of this time an unfavourable change took place,—the knee became larger, a discharge of thick, fetid pus occurred, and this became more abundant every day; his appetite was capricious, he had constant restlessness, disturbed sleep, wasting hectic, and was frequently bathed in perspiration. Mr. Cadge considered that any further attempts to preserve the limb would only jeopardize the man's life, and he, accordingly, amputated the thigh on July 20, fifty-six days after resection.

An examination of the limb showed a total absence of any repair between the cut portions of the femur and tibia, the cancellous texture of each was infiltrated with dark blood, the growth of brown pulpy synovial membrane was most extensive. Coagula and collections of pus existed in several places, and a large abscess had formed behind the upper part of the tibia.

The stump healed slowly, and the patient left the Hospital in excellent health on September 1, 1860.

KING'S COLLEGE HOSPITAL.

CLINICAL REMARKS BY MR. WOOD ON A CASE OF RADICAL CURE OF HERNIA — MODIFIED MODE OF OPERATING.

John B., aged 22, a sailor, discharged from H.M.S. *Conquerer*, for a right oblique scrotal hernia of ten months' duration, easily and completely reducible. He was recommended to Mr. Wood by Mr. Devonshire, Assistant-Surgeon to that ship, as a case for the radical cure.

Operation.—An incision directed obliquely downwards and outwards was first made through the skin of the scrotum over the middle of the hernial sac, with a small narrow-bladed knife. The edges of the skin were then separated from the subjacent fascia by carrying the blade of the knife flatwise under the skin to the extent of three-quarters of an inch from the margin of the incision. The denuded fascia was then invaginated by the fore-finger of the right hand into the inguinal canal, carrying the sac before it. The lower border of the internal oblique was then felt for, and raised upon the finger. The curved hernia needle was then carried along the finger at its thumb side (*i.e.*, towards the patient's linea alba) and passed through the conjoined tendon from behind forwards till the point of the needle was seen to raise the skin of the abdomen about one and a-half inches above the pubis. The skin of the groin was then drawn inwards as far as possible, before the needle was pushed through it. A piece of stout copper wire silvered, and tapered off at both ends to a flexible degree of thinness, was then attached by one end to the eye of the needle, and drawn back with it through the scrotal incision, and then detached and left in the wound. The invaginating finger was then carried outwards behind Poupart's ligament, or external pillar of the ring, as high up as possible. The aponeurotic structures were then lifted upon the finger, and the needle passed through them on the finger along its opposite border (*i.e.*, that nearest the ilium of the patient). The point of the needle was carried through the same aperture in the skin of the groin as in the first instance. The other end of the wire was next fixed to the needle, drawn back with it into the scrotum, and also detached. The sac of the hernia, at the scrotal incision, was then pinched up from the cord behind by the thumb and forefinger of the left hand, and the needle passed across it in front of the cord, in the same manner as in passing a needle for the cure of varicocele, but within the limits of the scrotal incision. The inner extremity of the wire (*i.e.*, that which included the conjoined tendon) was then fixed to the eye of the needle, and drawn through the sac across the front of the cord. The two ends of the wire were next drawn down till the loop or bend was close to the upper puncture, the loop being held by the forefinger of the assistant. The ends of the wire were then twisted firmly down upon the fascia and sac in the lower puncture, and cut off at a point about five inches distant from the skin. By traction upon the upper loop the twisted ends of the wire were then drawn up into the inguinal canal, invaginating the sac and fascia, and leaving, when drawn tight, about two inches protruding from the lower puncture. The upper loop of wire was next twisted firmly down into the puncture in the skin of the groin until the sides of the canal were drawn firmly together. The lower or cut ends of the wire were then bent into a small hook, and curved upwards, so as to meet the upper or loop end curved downwards to meet it in a corresponding degree. The hook was then fixed into the upper loop, a pad of lint inserted between the wire and the skin, and a spica bandage and compress put over all, so as to exercise firm pressure upon the posterior wall of the canal. The spermatic cord is left behind the wire with a small portion of the neck of the sac covering it. This part of the sac is obliterated by the pressure of the wire backward upon it.

The above method of operating is the one now practised in most cases of scrotal hernia by Mr. Wood. It is simple and easy in application, and has proved very decidedly successful in the cases in which it has been employed hitherto. There is less pain and much less discharge than in the cases where the ligature thread and hard compress were employed. The use of wire also gives the valuable advantage of enabling us to apply direct contact and pressure upon that part of the posterior wall of the hernial canal and sac close to the cord which is not included between the two ends of the wire, and so to effect its complete closure by adhesion at that point.

Mr. Wood has now operated in thirty cases, and up to the present time has had only six failures. The first case was operated on more than three years ago, and was shown at King's College Hospital a short time ago, quite cured, and wearing no truss.

Since the operation the case has done uncommonly well. There has been remarkably little suppuration. Some swelling of the testis showed the effect of the pressure in the inguinal canal. The wires were untwisted and removed with great ease and little pain sixteen days after the operation. The patient is now almost ready to be discharged (three weeks after the operation) with great consolidation of the parts.

GUY'S HOSPITAL.

OSTEO-CYSTO-SARCOMA OF THE HEAD OF THE TIBIA—AMPUTATION—RECOVERY.

(Under the care of Mr. COCK.)

A girl, aged 17, was admitted for enlargement of the head of the right tibia. For several months she had had pain in it, but she said that there was no increase of size until within the previous three weeks. It at first gradually, but lately rapidly, increased, becoming much larger during the week she was in the Hospital. The joint was free. There was some enlargement of the glands in the groin, but this, Mr. Cock believed was not due to implication by the disease. Amputation above the knee was performed. She very quickly recovered, and was discharged well. The following is a report of the examination of the disease, by Dr. Wilks:—

"The leg, when removed, had a large tumour on its inner side, of bluish colour, soft and fluctuating. On cutting through this, a quantity of bloody serum escaped, and on continuing the section longitudinally through the shaft the enlargement was seen to be due principally to a cyst which had been developed external to the upper end of the shaft. This was composed of a number of cellular cavities, the walls of which fell together when the fluid escaped, and it surrounded the bone on its inner and front aspect. The head of the tibia had undergone extreme induration, the cancellous structure being converted into a dense new bone; also some new bone was

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growing around the head and upper part of shaft, adjacent to the multilocular cyst. This bone was granular and brittle; among it there was also a little cartilage. On examination by the microscope of some of the materials on the walls of the cyst, this was found to be mainly fibrous, in parts changing into bone; the softer parts consisted of polynucleated branched cells, resembling myeloid. There were also some simple nucleated cells,—these were probably also myeloid, and not cancerous.

"The disease may be described as a complete ossification of the head of the tibia, surrounded by new bone and a cyst, and might therefore be called osteo-cysto-sarcoma—the new elements being of the simpler kinds, bone and the materials from which that is formed, fibrous tissue, cartilage, and myeloid. The latter two elements, however, were in very small proportion. The disease was probably innocent, and would, in another part of the body, have been a fibrous tumour, but springing up near bone contained osseous elements."

Medical Times and Gazette.

SATURDAY, JUNE 1.

ETHICS *versus* ETIQUETTE.

Leeds and Manchester have each had illustrations of the working of Medico-Ethical principles, in the cases of the Messrs. Braithwaite and Mr. Roberton, which for various reasons require more than a passing notice. That well-known, laborious, and eminently useful member of the Medical literary body, the Editor of "Braithwaite's Retrospect," seems to have become desirous of improving his professional status, and of adding the magic letters M.D. to his professional title. Of course such a thing is susceptible of ridicule; but in sober truth, it is one inevitable result of the slow changes for the better which have come upon our art and its Practitioners. It may seem trivial; but as it really implies a better appreciation of the professional, in contradistinction to the trade elements of practice, it indicates a spirit eminently beneficial to society, and creditable to our Profession. Eschewing the widely-opened portals of the College of Physicians of Edinburgh, Mr. Braithwaite passed on to St. Andrews, where an Examining Board confers the highest of Medical titles on all competent comers. The success of the wanderer was celebrated in a sort of public Epithalamium (if such a phrase may be applied to the praise of an adopted Alma Mater), and all the Medical world of the "Retrospect" were informed in sounding lines of the dignity of that ancient University, the rigour with which ignorant aspirants are repelled from its academic honours, and the difficulties which the admitted had to overcome. No one could envy the simple happiness of the Editor in his newly-acquired title of Doctor of Medicine, although his fervent praise could not fail to excite a smile with those who knew something of the realities.

But honour and rank have their drawbacks even to Doctors of Medicine, and many a Practitioner who has sought them, like Dr. Braithwaite, after years of successful general practice, has found how costly they are in the loss of old patients. In England, unlike the custom of Scotland, the "Physician" is a "pure," that is, one who dispenses no medicines, takes fees only, and does not attend ordinary family practice. So that when a General Practitioner in an English town assumes the higher rank, he is expected to take the appropriate line of practice, and his patients are apt to seek elsewhere for a "family Doctor." The Messrs. Braithwaite (both have the title of M.D.) sought to prevent this catastrophe by issuing a printed circular to the effect that they continued their usual family practice, both as to fees and duties, and that it was only when called into consultation as Physicians that they expected the usual Physician's fee.

A Nemesis speedily overtook them, for one of our contemporaries was hoaxed with a report of an indignation-meeting of several Members of the Profession alleged to have been held in Leeds, at which it was resolved that the circular was an unprofessional thing, and that none of them would meet in consultation the two Doctors, who, Janus-like, looked for the main chance in two directions. In short, according to the hoax, they were punished with the extreme penalty of the law Medical, namely, excommunication. They were put into the same position as Homœopaths, bone-setters, worm-doctors, and empirics generally.

Now, although no such meeting was held or resolution come to, yet it cannot be doubted that the report did express the current opinion of the Profession in general, and thus a question in Medical casuistry arises, namely, whether the excommunicated in these cases commit any excommunicable offence? We take for granted that there is no law which prevents a Doctor of Medicine being a "family" as well as a "Consulting" Physician. A Surgeon or an Apothecary may, and often does, act in the double capacity; the two offenders in question probably proffered to do no more than what one of them (the senior) had already been in the habit of doing, under his previous title of plain "Mr." Practically, indeed, it is a thing both just and fitting, that a General Practitioner who has distinguished himself by his Professional labours, whether literary, scientific, or practical, should, in his old age, have the *summi honores* of the Profession, and, at the same time, be at liberty to help his old friends and patients in his old way. There is, at least, nothing immoral in all this. The proceeding in question may be condemned as a breach of Medical *etiquette*, but not of Medical *ethics*. It may not have been in good taste to send round a printed circular (though even here much depends on the way in which it was done); but is a man to be excommunicated from church ordinances and social rights, because he eats his dinner with his knife, and picks his teeth with his fork? It would be sufficient for all practical purposes, in a case like this, if the offender were admonished as to his breach of good manners; but he is usually punished as if he had been guilty of a most serious breach of good morals.

The Manchester case is one of greater difficulty and importance than that of Leeds. The Medico-Ethical Society of Manchester had as one of its Vice-Presidents Mr. John Roberton, an old, and we may assume, a highly esteemed Practitioner of that city, or he would not have occupied so eminent a position in the Society. We need not speak of the world-wide reputation he has achieved, through his researches in the Philosophy of Obstetric Medicine. It appears that Mr. Roberton thought it his duty to visit a lady, a near relative and an old patient, together with a Homœopathic Practitioner who had been called in previously by the husband. This conduct was brought under the notice of the Committee of the Society, which has a rule, that "under no circumstances" shall an orthodox Practitioner meet a Homœopath. Mr. Roberton was, of course, found guilty of breach of the rule, after a full explanation of the circumstances, which exceptionally influenced him on the occasion complained of. What his sentence is, we know not, but we may suppose that it is excommunication, so far at least, as the Medico-Ethical Committee is concerned.

Let us examine this case a little more closely. In the first place, Mr. Roberton's position was not that of a Practitioner with an ordinary patient. He did not attend as Medical Practitioner simply, but as a relative. The transaction was one within the limits of a family circle, and on that account should have been held sacred. Suppose that the wife or daughter of a Physician chose to consult a Homœopath in a

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dangerous illness? Is he to stand utterly aloof, and not interpose one word of counsel or remonstrance? As to Medical treatment, indeed, consultation would be useless; but need a Physician hesitate to oppose the absurdly starving diet of the Homœopath?

Or we will suppose, for argument's sake, the Homœopathic Practitioner to be the very worst of the class. Mr. Roberton, in the first instance, refuses to meet him; the husband persists in his wish that the Homœopath should continue. Query, is Mr. Roberton absolutely to abandon his old patient and relative in her extremity to the obstinacy of the husband, and the irrational dogmas of Homœopathy? Will his presence avail nothing in preventing mischief? If the Physician or Surgeon exist solely to the end that he may set people's prejudices right about homœopathy, and snub the Homœopath, then, unquestionably, the rule of the Medico-Ethical Society of Manchester may be considered well-founded, and Mr. Roberton ought to have abandoned his patient, helpless as she was in the matter, to her fate. But if it be true that the Profession of Medicine exists solely to the end of saving human life and relieving human suffering, then no such rule can be absolute, and Mr. Roberton, in determining not to abandon his relative to the Homœopath, acted rightly. Of course we presume (although Mr. Roberton's own defence is not very clear on this point) that he carefully guarded himself from appearing to favour Homœopathic doctrines and practice, and simply did his duty without reference to the Globulist. The case was an exceptional one, and should have been so considered. The conduct of the Medico-Ethical Society of Manchester, from this point of view, is not in accordance with its title, nor, we believe, with its fundamental principles; for nothing can be morally right which obstructs an honest man, as Mr. Roberton confessedly was and is, in the performance of a plain moral duty.

The objects of proceedings like those which have occurred at Leeds and Manchester are in general most praiseworthy, inasmuch as they tend to develope and maintain an *esprit de corps* in which the Profession at large is deficient. As regards Homœopathy and other quackeries, the rule of excommunication is, generally speaking, sound and useful. Men must not be allowed for their own profit to sanction a false and life-endangering system, and to curry favour with their patrons. But great care must be taken by the promoters how they bring public opinion into conflict with their decisions, when public opinion has right and humanity on its side. If questions of mere etiquette are made superior to those of obvious moral duties, they will only advance the views of Homœopathic and other empirics, ever ready to appeal to the prejudices and ignorance of the public against just professional condemnation. At the same time, the development of a true *esprit de corps* will be hindered, for men like Dr. Braithwaite and Mr. Roberton have too good a name and position to be profitably dismissed from the ranks, while others who would add weight to the moral influence of these proceedings will silently stand aloof. It is a most serious mistake, even in policy, to oppose Medical Etiquette to Medical Ethics.

Unfortunately, there is no public authoritative code of Medical ethics or etiquette in this country, so that a man may sin innocently because ignorantly; and this is another reason for extreme moderation in the indictment of offenders against conventional rules, and in the imposition of penalties. Whether we shall ever possess such a code seems doubtful. The British Medical Association has long been pregnant with one, but, like many other schemes of that body, the result promises to be only an abortion. A Medico-Ethical Committee has, we believe, been long in existence, yet the Secretary was himself not long ago the subject of a Medico-Ethical trial. We trust the Ethical Society at Manchester will revise the proceedings of its committee and reconsider its laws, and thus set a good example to our Colleges and great chartered Societies.

THE WEEK.

In our remarks in late numbers upon recent changes in the Army Medical Warrant, we stated that these changes would be followed up in the Navy. Our information was only too correct, for the Secretary of the Admiralty has just issued a notification that:—

"Her Majesty has been graciously pleased to direct, by her Order in Council, dated 16th April, 1861, that the relative rank of Officers of the Navy and Army shall, in future, be as follows:—

"CIVIL BRANCH.

"Inspector-General of Hospitals and Fleets, after three years' service on full pay as such, to rank with Major-General, according to the date of the completion of the said three years' service.

"Inspector-General of Hospitals and Fleets, under three years' service on full pay as such, to rank with Brigadier-General, according to date of commission.

"Deputy Inspector-General of Hospitals and Fleets, after five years' service on full pay as such, to rank with Colonel, according to the date of the completion of the said five years' service.

"Deputy Inspector-General of Hospitals and Fleets, under five years' service on full pay as such, to rank with Lieutenant-Colonel, according to date of commission.

"Staff-Surgeon, to rank with Lieutenant-Colonel, but junior of that rank.

"Surgeons, to rank with Major, according to date of commission.

"Surgeons, promoted on and after the 28th of March, 1861, to rank with Major, but junior of that rank.

"Assistant-Surgeon, after six years' service on full pay as such, to rank with Captain, according to the date of the completion of the said six years' service.

"Assistant-Surgeon, under six years' service on full pay as such, to rank with Lieutenant, according to date of commission."

We receive the following comments upon this Order in a leading article in the *Daily News* as a very favourable sign of the manner in which Medico-political questions are being treated by the most influential writers of the general Press:—

"As regards the benefits conferred upon the Medical Officers of the Army and Navy by the Warrants of 1858 and 1859, we would observe, with all respect and gratitude to Lord Herbert, Sir John Pakington, and others who were instrumental in obtaining them, that without such concessions the Medical Service, whether of the Army or of the Navy, must at no distant time have ceased to retain any pretence of being an efficient department."

Our contemporary adds, very justly:—

"We may be allowed, without exposing ourselves to the charge of impatience or unreasonable grumbling, to inquire how it is that the good service pensions held out to the most meritorious Medical Officers in the 16th clause of the Naval Medical Warrant have as yet in no case been awarded, while the Medical Officers of the Army have justly been long in the enjoyment of those honourable recognitions of merit and service?"

The last of Dr. Beale's microscopical demonstrations was delivered at the College of Physicians on May 20. He spoke again of the nature of white fibrous tissue, with its strings of "nuclei" (or small portions of germinal matter), arranged at equal distances, and its wavy fibrous bands, which he believed to be the "formed material" corresponding to the germinal matter. He gave examples of the relation of the "germinal" to the "formed" material, in the case of cartilage; in which each "elementary part" (that is, each portion of "germinal," surrounded by a certain quantity of "formed" matter) might be distinct, and constitute a separate "cell;" or as in the case of the ensiform cartilage of the young mouse, the masses of germinal matter may exist close together, with the thinnest possible layer of formed material between them, in which they lie as in a matrix; or as in the case of older cartilage, the quantity of

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formed matter lying interstitially between the separate masses of germinal matter may be largely increased. But whether each elementary part of any tissue be entirely distinct, as in epithelium; or whether each be welded to its neighbours by its surrounding formed material, as in common cartilage, the relation of one to the other is identical: and in the case of secondary deposit, whether of fat or starch, whether in health or disease, in cartilage or epithelium, it occurs in the interior of the elementary parts, having the germinal matter (primordial utricle) between it and the cell wall or formed matter. The lecturer next spoke of bone, and said that whereas dry bone consisted of air-holding spaces, or lacunæ imbedded in a matrix, in recent bone those spaces contained living tissue. With regard to the canaliculi, or fine tubes which proceed from the surface of the lacunæ, two separate hypotheses may be maintained: one is, that they consist of processes, thrown out, or growing out from the "cells" before ossification; or perhaps that they are thrown out after ossification, and then that they bore their way into the bone in the same way as the Pacchionian glands bore their way into the substance of the skull, or as the new Harversian canals are formed in old bone. But Dr. Beale disbelieves this hypothesis, on the ground that the germinal matter is never seen projecting into the canaliculi; in fact, if carmine be accepted as the test of germinal matter, the latter is always oval, and occupies the lacunæ without projecting into the canaliculi in the least. It is true that cells with stellate projections are found in the periosteum of the jaws, but not in growing bone; in fact, Professor Beale believes that the calcareous matter is deposited in globules, and in the outermost and oldest portion of formed material surrounding each germinal centre; and that the canaliculi are channels, left between the calcareous particles, for the access of convergent currents of nutrient liquid; and that their contour is polygonal, not round, as would be the case if they were projections from the lacunæ. Concerning teeth, the Lecturer stated that the dentinal tubes are really prolongations from the central germinal matter of the tooth, and are processes of germinal matter, with calcareous matter between them. He again reverted to the subject of connective tissue, and observed that this was the name given to almost any tissue whose structure was inadequately defined, —sometimes obsolete capillaries, or veins, or other structures whose functional activity is lost; and he reiterated the assertion, that if the vessels be carefully distinguished by injections, no trace of yellow or white fibrous tissue can be found in the diaphragm of the young mouse. In concluding this brief account of the chief points noticed in Professor Beale's demonstrations, it is but due to him to notice the very great research which he has evidently bestowed upon the microscopical and chemical characters of organised tissues. The specimens which he has exhibited, for the most part, justify his statements; that his hypotheses have sprung naturally from his observations, and not that he has made a series of observations to support any pre-formed hypotheses. His doctrines respecting "germinal material" (by-the-bye, he uses the words matter and material in rather an unfortunate way) are a very great advance upon the "cell theory;" for they embrace and enable us to account for all the facts which the cell theory accounts for, as well as all those which it does not. They show that "cells," or hollow cavities, *may* be formed by the growth of elementary living particles, or that they may not; and that the cell-form is an accidental rather than an essential attribute of "elementary parts," or units of living structure.

In the Court of Queen's Bench in Ireland, on Monday last, the Right Hon. A. Brewster, Q.C., with whom was Mr. Jellett, showed cause against the conditional order of May 3, to which we alluded in our impression of the 11th ult. (p. 498). Our readers may recollect that the order referred to was to the effect that a *mandamus* do issue commanding Dr. Steele, the Registrar of the Branch Medical Council in Ireland, to restore the entry, in the local Register, of the name and qualifications of James Barker, jun., to its original state, by inserting therein the letters M.D., to which Mr. Barker considered himself entitled in right of his being a Licentiate of the King and Queen's College of Physicians. The question was fully argued on both sides on Monday and Tuesday, but the Court deferred judgment. We shall probably be able to announce the result next week.

When the University of London was named as a new Constituency in the Reform Bill of last Session, a requisition to Sir John Romilly was signed by upwards of 230 Graduates, requesting him to allow himself to be put in nomination as a candidate. Sir Charles Locock and Dr. Foster also received requisitions, and agreed to come forward. The friends of the University are in great hopes now that one of the four vacant seats will be allotted to them; and at a meeting of the former requisitionists to Sir John Romilly held on the 24th ult. at the Freemasons' Tavern, the following resolution was passed:—

"That the former Committee be requested to resume their functions, and that the gentlemen now present, and those who answered the circular, be requested to act as an Executive Committee to watch over the proceedings of the House of Commons in regard to the probability of the University of London being created a constituency to return Members to Parliament, and to take such steps as may seem to them advisable to bring Sir John Romilly forward as a candidate at the earliest period; and that all gentlemen who signed the requisition to Sir J. Romilly be invited to act upon such Executive Committee, with power to add to their numbers."

We presume that the supporters of the Medical candidate will also be on the alert.

Mr. Henry James, F.R.C.S., has withdrawn from the contest for the office of Surgeon to the Prisons at Clerkenwell and Coldbath-fields, because conditions have been imposed on the future holders of that office which must render it extremely irksome. For instance, says Mr. James,

"The Visiting Justices have directed that, for the future, the Surgeon shall attend the prison between the hours of seven and nine o'clock a.m. and nine and ten o'clock p.m. daily; and I am officially informed that no assistant, however qualified, will be allowed, as heretofore, to perform any portion of the every-day routine work connected with the office.

"Additional duties have also been imposed; and with these a diminution has been made in the emoluments of the appointment.

"It is evident that during the winter months the Surgeon can see his patients only by artificial light, a great disadvantage in the detection and treatment of disease.

"The duty of visiting the warders twice a-week, at their own homes, during illness and while under the care of their Medical attendants, is, I consider, an unpleasant and obtrusive one."

It does not appear to us, from the letter of the regulations, that "the Surgeon can see his patients *only* by artificial light," during the winter, for although he must visit the prison at certain hours, it does not appear that he can come at no other time. Nevertheless, it is a pity when restrictions of any sort are made, which, from their vexatious nature, tend to keep high-spirited independent men from seeking for public offices.

THE ASSOCIATION FOR SOCIAL SCIENCE.—Last Saturday evening the National Association for the Promotion of Social Science held a *conversazione* at the South Kensington Museum. The Picture Galleries, the Food Collection, and the Educational Museum were thrown open, and their contents interested an assembly of upwards of 1000 guests of distinction.

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REVIEWS.

Lectures on the Diagnosis and Treatment of the Principal Forms of Paralysis of the Lower Extremities. By C. E. Brown-Séquard, M.D., F.R.S., etc. 8vo. Pp. 118. London: 1861.

Is there such a thing as "*reflex paralysis*"? Can the excitation of a sensitive nerve occasion, not reflex *action*, but a phenomenon *the reverse of action*, loss of muscular power, through the medium of the spinal cord? Reflex *action* we are quite familiar with, we have known all about it, or we ought rather to say a great deal about it, for many years past. And we have heard the term "reflex" applied to other things besides muscular contraction, but at the same time our ideas have been somewhat confused upon the matter. We have heard amaurosis called "reflex," and when, some time ago, we opened the edition of Romberg on "Diseases of the Nervous System," which the Sydenham Society published, we saw a whole chapter devoted to the subject of "reflex paralysis." We know, too, that so far as the general idea of such a thing existing went, many British Physicians and Surgeons have long been recognising it. There have, in short, been met with by different men at various times, cases of paralysis which the amount of disease present in the nervous centre or its coverings would not account for, which blood-poisoning would not account for, but which were in fact associated as a sequence with injuries or diseases of certain parts or organs; *ergo*, these cases were, it was assumed, cases of reflex paralysis. Yet few seem to have asked, How can this be? How can irritation of a sensory nerve produce by reflected influence anything but *action*?

If there be such a thing, however, as paralysis from reflected influence, what are its diagnostic marks? If there be such a form of disease, how is it brought about? These are all questions which Dr. Brown-Séquard sets himself to solve in the Lectures before us.

Is there a reflex form of paralysis? Put the improbability out of the question for a moment, and let us look for facts. Have cases of paralysis ever been met with in which no pathological view will meet the circumstances of their origin, phenomena, and cure so well or satisfactorily as one which acknowledges the primary operation of an irritation acting upon some sensory nerve or nerves? cases again in which no other explanation whatever is at hand?

Dr. Brown-Séquard says there are such cases, and we agree with him. We have said that the fact has long been recognised. Our Author admits this, and occupies many pages of the book before us by references to his predecessors in the same field of research. The whole matter is also treated of at length by Romberg in the volume we have before mentioned. Let us see what these observations amount to. In 1833, Mr. Stanley published in the "Medico-Chirurgical Transactions" a paper entitled, "On Irritation of the Spinal Cord and its Nerves in Connexion with Disease of the Kidneys," where cases of paraplegia are recorded in which no morbid appearance was detected in the cerebro-spinal axis, but where there were present inflammation of the bladder or kidneys or gonorrhœa. Similar cases of urinary paraplegia, as it has been called, have been since recorded by Graves, Leroy d'Etoilles, Rayer, etc. Mr. Spencer Wells recorded in the *Medical Times and Gazette* (Nov. 14, 1857) cases of this kind, and made them the basis of a Clinical Lecture, the object of which was to point out the distinct nature of this form of paraplegia, the primary character of the urinary disease, and the mode in which reflex paraplegia is to be diagnosed. The views entertained, however, by these several writers have not been permitted to pass unchallenged. And their opponent has not been an insignificant one. Dr. Gull, in the fourth volume of the "Guy's Hospital Reports," (Third Series), as well as in a paper on Paraplegia, in the 39th volume of the "Medico-Chirurgical Transactions," endeavours to overturn this theory by a criticism on Mr. Stanley's cases; but in doing so he is driven to admit all that his opponents ask, viz. that "the spinal cord may have its functions impaired, and even lost, and that suddenly, as far as the power of motion is concerned, without any distinct amount of anatomical lesion." He writes this while commenting on a case in which urinary symptoms preceded a fatal paraplegia, and in which, after death, "on the most careful microscopical observation, nothing abnormal was discovered in the texture" of the cord. This case is triumphantly quoted by Brown-Séquard among those which support his views of reflex paraplegia. Dr. Gull is evidently in a strait to account for the paraplegia in these cases. He refers it to a myelitis, and looks "to the *veins* or the *blood itself* as the means by which the lesion is propagated" from the urinary organs. We will allow Dr. Brown-Séquard to dispose of Dr. Gull in his own way:—

"The facts brought forward by Dr. Gull against the views of Mr. Stanley are not at all in opposition to these views. They show that myelitis may be caused by an irritation originating from the urinary apparatus; but they do not show that such an irritation must produce a myelitis, in order to induce a paraplegia; or, in other words, that there is no other mode of production of a paraplegia by such an irritation than through a myelitis."—P. 31.

In fact, in order to support his theory, Dr. Gull is compelled to accept the most trivial post-mortem evidence of inflammatory lesion of the cord. "The small amount of exudation, and the apparently slight changes of structure which accompany the inflammatory lesion of the cord, is one of the most remarkable points in their history. . . . . The *injection of vessels in the structure of the cord* must be considered an important indication of organic lesion." ("Medico-Chirurgical Transactions," *loc. cit.*) Where else would Dr. Gull regard mere injection an important mark of organic lesion? In his case before referred to, neither this nor any other definite lesion was discovered, although "hours were spent in examination of the cord." In Dr. Gull's own words (except on the hypothesis of reflex irritation), "the case remains unexplained."

But although urinary paraplegia is the field on which the battle of reflex paralysis has been fought, it is by no means the simplest or most easily established example of this form of disease. Brown-Séquard alludes to the following sources of reflex irritation:—Disease of the uterus, such as anteflexion with congestion, chronic metritis, enteritis, worms, affections of the lung or pleura, diphtheria, teething, irritation of the nerves of the skin as from cold and wet (supposed rheumatic paralysis), and from erysipelas, disease of knee-joint (acute inflammation), and neuralgia. Other explanations of the occurrence of paralysis in several of these cases may be advanced as they have been in the instance of urinary paralysis. For some cases, as of paralysis from worms, *e. g.* tænia, where numerous cases on record attest a rapid cure on expulsion of the parasite, we do not see what other explanation can be put forward. Teething, as a cause of paralysis, is nearly in the same position, only it might be argued here that the paralysis was the result of enteritis; still this can only occur in a reflex manner and produce paralysis also by reflex influence. We will quote at length our author's reply to various objections which may be raised to his views of the reflex origin of some of these forms of paralysis.

"1.—As regards paraplegia depending upon disease of the womb, we will remark, that except in cases of very great enlargement, as sometimes in pregnancy, pressure upon the nerves of the lower limbs cannot be the cause of the paralysis. In the case I have mentioned of a young lady who was cured by using a bandage, the uterus was certainly not larger than in a woman at the end of the second month of pregnancy.

"2.—It is possible that in cases where urine accumulates in the bladder, and remains there a long while in an altered condition, some of its principles may be absorbed and act as a poison; but on the other hand, however possible this is, there is no proof that a paralysis has ever been produced in this way; and, on the other hand, we find that it is with the degree of pain that paraplegia has relation in cases of paralysis of the lower limbs, following an affection of the prostate, the urethra, or the bladder, and not with the retention of urine. . . . . .

"3.—Certainly in cases of nephritis, there may be paralysis due to uræmic poisoning; but this kind of poisoning does not manifest itself only by a paralysis. On the contrary, it causes other and most striking symptoms, none of which have existed in the case I have cited and in other more or less similar cases.

"4.—I am willing to admit that there is some alteration in the blood in diphtheria, or even in dysentery, in enteritis, etc. I am also willing to admit that this alteration may cause a degree of paralysis; but that a complete paraplegia, without any diminution of voluntary movement elsewhere, may be due to a cause, which, as it is supposed to be in the blood, is

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circulating everywhere in the body, I think, no one can admit." —P. 21.

The same point had been previously put by Mr. Spencer Wells, who, speaking of this explanation of urinary paraplegia, said, "In this case, the nervous system suffers in common with the whole body, from the abnormal condition of the fluid on which its nutrition depends, and it occasionally suffers before other organs, or to a greater degree than they do. But I think we must have something more than this to connect urinary disease with paraplegia as cause and effect. *You want to account for the lower extremities only, not the whole system suffering*, and you cannot do so very satisfactorily by chemical changes in the blood."—*Medical Times and Gazette*, Nov. 14, 1857, p. 495. But to proceed with our author:—

"5.—It is true that cold and wet often cause rheumatism; but when after an exposure to cold and wet, a man is suddenly seized with paralysis, without having the least symptom of rheumatism, we certainly have no right to place his affection in the vague group of rheumatismal paralysis.

"6.—No doubt that diseases of the spinal cord and its membranes, very often manifest themselves by pains resembling neuralgic pains, and located either in a joint or along the course of a nerve; but, besides the fact that, in such cases, paraplegia when it appears, is accompanied by symptoms indicating a disease in the spinal cord or its membranes, which was not what occurred in the cases I have mentioned, there was real inflammation (of a joint, or of the skin) in two of these cases, instead of the referred pain due to a centric cause."—P. 22.

Nor is the assumed occurrence of paralysis through reflex influence wanting in experimental basis. More than half-a-century ago, Comhaire extirpated the kidney in living dogs, with the effect of instantly inducing paralytic weakness of the hind leg on the side operated upon. Brown-Séquard found the same result on extirpating either a kidney or one of the suprarenal capsules. Fortunately this experiment applies primarily to that form of reflex paralysis chiefly discussed.

How is Reflex Paraplegia to be Diagnosed?—The following are, according to our Author, its leading characteristics:—"1. An outside excitation, starting from some sensitive nerve, exists before the reflex paralysis appears. 2. The variations in intensity of the outside excitation are often followed by corresponding variations in the degree of the reflex paralysis. 3. When the outside excitation ceases altogether, the reflex paralysis also sometimes ceases altogether, and in a short time. 4. The various modes of treatment of paralysis are usually unsuccessful in cases of reflex paralysis, so long as the outside excitation persists."—P. 8.

With respect to the diagnosis of urinary paralysis Dr. Brown-Séquard has been anticipated by Mr. Spencer Wells, who lays down most distinctly, in the Lecture we have before quoted, the most important of the marks which distinguish this form of reflex paralysis from that arising from myelitis. We think it right to give the credit of priority where it appears to be due. The coincidence of the two observers only seems to confirm the correctness of their views, and to strengthen the reliance which we would place on the characteristics upon which both agree. We will place these diagnostic marks in parallel columns, of course altering the order for the sake of comparison:—

URINARY PARAPLEGIA.

Spencer Wells.	*Brown-Séquard.*
"Some impediment to the discharge of the urine is one of the earliest symptoms.	"*Preceded* by an affection of the bladder, the kidneys, or the prostate.
"This is closely connected with obstinate gastric derangement.	"Usually obstinate gastric derangement.
"The weakness of the limbs is rather extreme debility than paralysis.	"Usually paralysis incomplete.
"The tactile sensibility is slightly, if at all impaired, but the muscular sense may be almost lost.	"Anæsthesia rare."
"The limbs are tolerably well nourished. They may be thin, but there is no marked muscular atrophy, and their temperature is very little lowered.	[Usually in reflex paraplegia muscles do not become atrophied.]
"The sphincter ani is not paralysed, though it may be weak. The bladder preserves some degree of contractility.	"Bladder and rectum rarely paralysed, or, at least, only slightly paralysed.
"There may be no pains in the back, and no pain on pressing the spinous processes, or applying a hot sponge to them.	"Very rarely pains in the spine, either spontaneously, or caused by pressure, percussion, warm water, ice, etc.
"The degree of weakness in the limbs varies with the state of the urinary organs. Great amendment will sometimes rapidly follow catheterism, and the removal of any obstruction to the free discharge of urine.	"Great changes in the degree of the paralysis corresponding to changes in the disease of the urinary organs. Cure frequently and rapidly obtained, or taking place spontaneously after a notable amelioration or the cure of the urinary affection.
"In the early stages of the disease there is no history of convulsions, cramps, spasms, formication, or violent neuralgic pains."—(*Op. cit.*)	"Spasms in paralysed muscles extremely rare. No feeling of pain or constriction round the abdomen or the chest. No formication, no pricking, no disagreeable sensation of cold or heat."

To the above marks Brown-Séquard, however, adds the following, the general truth of which, however, we are not disposed to grant:—"Usually lower limbs alone paralysed." "No gradual extension of the paralysis upwards." "Some muscles more paralysed than others." "Reflex power neither much increased nor completely lost."—P. 33.

And now, what explanation can be offered of the irritation of a sensory nerve producing *not spasm or contraction, but paralysis?* Stanley would not be expected to attempt one; he wrote at a time when Marshall Hall was just announcing the reflex function of the medulla spinalis. Romberg (*op. cit.* vol. ii. p. 376) wrote thus:—"While we are possessed of physiological facts by which we may estimate and interpret reflex spasms, we are lamentably deficient in our interpretation of reflex paralysis." Mr. Spencer Wells asked the question: "How does it (the urinary affection) lead to paraplegia?" but the only approach to an answer he gave is this, "that if you disturb the normal condition of the sympathetic nerves supplying the kidneys and bladder, you need not be surprised at an alteration in the condition of the spinal nerves with which the disordered sympathetic nerves communicate, or in the condition of the muscles which derive their motor power from the spinal nerves whose relations with the sympathetic have been disturbed." Adding, "When we obtain a more exact knowledge of the reciprocal influence exerted by the spinal cord and sympathetic ganglia upon each other; when we can determine what power the sympathetic receives from the cord, and what power it communicates to the cord, we may obtain more definite notions on these points."—(*Op. cit.*) It remained for Dr. Brown-Séquard to supply the missing link which should bring reflex *paralysis* into the same category with other better known forms of reflex *action*. And it is in affording us this explanation that the chief merit and novelty of Brown-Séquard lies. We cannot enter into all the evidence which he has accumulated to prove that blood-vessels are liable to contract under the influence of reflex stimulation. We think the point as fully established as any other in nervous physiology. Nothing can to our mind be better made out than this in former books of our author. Taking it then as an established truth, Dr. Brown-Séquard proceeds:—"In three different places a contraction of blood-vessels may cause paraplegia—1. In the spinal cord; 2. In the motor nerves; 3. In muscles. A contraction of blood-vessels in the spinal cord, *I have seen* (in the vessels of the pia mater) taking place under my eyes, when a tightened ligature was applied on the hilus of the kidney, irritating the renal nerves, or when a similar operation was performed on the nerves and blood-vessels of the suprarenal capsules. Generally in those cases the contraction is much more evident on the side of the cord corresponding with the side of the irritated nerves, which fact is in harmony with another and not rare one, observed first by Comhaire (as regards the kidney), and often seen by me after the extirpation of one kidney, or of one suprarenal capsule—*i. e.* a paralysis of the corresponding lower limb. It is probable that the irritations starting from the urinary and other organs produce a paraplegia by a contraction rather

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of the blood-vessels of the spinal cord than of those of the motor power and muscles. However, in this form of paraplegia it is not rare that a notable diminution of temperature of the paralysed limbs shows that the blood-vessels of the part are also contracted."—P. 24. Another explanation is given in the production of a "*morbid reflex influence on nutrition*," which, however, "seems usually not to exist in reflex paraplegia, except in that form in which muscles become progressively and rapidly atrophied and altered (*wasting palsy*)."—P. 25. A diminution of supply of blood is everywhere equivalent to a diminution in vital power, either in the nervous centres, nerves, or muscles thus deprived of their normal stimulant. We confess that we do not see that we are dealing with a mere hypothesis here. It is to our minds a fair and reasonable theory of reflex paralysis which Dr. Brown-Séquard offers to our acceptance, founded as far as a theory can, in the nature of things, be founded, upon an experimental and physiological basis. But observation must be carred a step further. We must learn exactly how the contraction or relaxation of the blood-vessels of the cord is produced. And looking to the recognised power of the sympathetic nerve over the blood-vessels, the influence of the sympathetic in the production of reflex paralysis will probably be made out by some future worker.

A great part of the second of the three Lectures before us is occupied by a detailed account of the line of treatment to be pursued in reflex paralysis. For this we must refer our readers to the Lectures themselves, remarking, however, that Dr. Brown-Séquard's treatment appears to us to be radically faulty. We have very little faith in the rules he has laid down as to the use of ergot, belladonna, strychnine, and opium, in the treatment of reflex paralysis, and we think his employment of antagonistic remedies in combination is, so far as several trials in our own hands have gone, as unsuccessful in practice as it is bad in principle.

FOREIGN CORRESPONDENCE.

PRUSSIA.

Breslau, April 29.

SILESIA: ITS NATURAL ASPECT, ITS INHABITANTS AND ITS DISEASES.

The Prussian Province of Silesia has an area of 3705 square miles, extends 250 miles from South-West to North-East, and is forty-five miles broad (latitude 49° to 52° north). The Oder, which runs through the whole length of the country, divides it into two nearly equal parts, of which the right is plain, flat, and sandy, the left hilly and mountainous, and more fertile and better cultivated than the former. Politically and socially, however, Silesia has from time immemorial been divided into Upper and Lower Silesia; the former is woody, fertile, and of a somewhat rough climate; the latter is milder, for the most part open, and is only separated from Bohemia by a high mountainous tract, which runs along the whole South-Western boundary. These mountains, the "montes gigantei," or Riesengebirge, rise to from 4000 to 5000 feet, and are extremely rich in mineral waters, thermal springs, and medicinal plants, from which the people prepare all kinds of tinctures, plasters, and ointments.

THE CLIMATE.

On the whole, the climate of Silesia is healthy. There are very few marshes or morasses in the country, which is thickly wooded, and abounds in pines and firs, the aromatic exhalations of which fill the air; and its many rapid rivers contribute to a thorough ventilation and purification of the atmosphere. There is no want of good drinking water. The medium temperature of the country is nearly 48° F.; but in the mountains it is only 41° F. to 43° F. In the plains the thermometer, in January, never falls lower than — 13° F., and this only lasts for a few days; in the mountains the minimum temperature is — 26° F. Sometimes the snow there is so high, that the inhabitants cannot leave their houses for weeks together. Breslau, the metropolis of Silesia, has a medium temperature of 46·04° F., and is, therefore, colder than Berlin, which, although it is situated further north, has an average temperature of 48·09° F. The province of Brandenburg, including Berlin, is drier and more healthy than Silesia; the climate of the latter is moist; the soil contains more humus, and is, therefore, more favourable to vegetation. The range of temperature is very great in this city, where it amounts to 38° F., while in Berlin it is only 34°. Of the larger towns of Germany only Vienna shows a still more considerable range than Breslau. In January the average temperature here is 25·745° F., in July, which is the hottest month, 64·2° F. The heat generally rises in July and in the beginning of August to 77° F. The town of Neisse has the highest average temperature in Silesia; it is situated in a marshy plain, sheltered by mountains, and is for this reason continually troubled with ague.

Throughout Silesia west winds prevail; in summer north-west, in winter south-west. The summer is, therefore, generally cool and moist, the winter mild and moist. In May and June the winds are mostly north-west; in October and December south-west; and February, March, and November, are the roughest months of the year. In summer, storms, accompanied with hail, sleet, snow, and heavy rains, which swell the neighbouring rivulets to a great extent, are very frequent; they generally rise in the southern mountains, above the Zobtenberg, a mountainous cone, 2250 feet high, which stands isolated in the middle of the country. From the earliest times, therefore, the mountains have been the weathercocks of the country, and the Zobtenberg is the special barometer of this city; if it is blue, fair weather may be reckoned upon; if clouded, rain is sure to follow.

The quantity of rain which falls in Silesia amounts to 23 inches. Breslau has, on the average, 80 fine days, 103 mixed, 182 dull and cloudy, 41 foggy, 86 rainy, and 28 days, when snow falls. The heaviest rains fall in June. The quantity of rain is not large when compared with other cities; but as the soil is clayey, it retains the water for a long time, and in wet weather the town soon becomes dirty. The whole extent of the banks of the Oder is, especially in spring, but sometimes also in the middle of summer, subject to inundations. The furious Neisse and the Bober rank next to the Oder in destructive force. In consequence of the inundations made by them certain diseases, mostly ague, but also typhoid fever, are observed here, and more especially in the plains. The course of the Oder is for the most part through woods and meadows, which are not fit for agriculture; the land consists partly of alluvial territory, clay and gravel, covered with a more or less thick layer of humus; this is especially the case in the neighbourhood of Breslau, where extensive manuring has changed the country into a garden. On approaching the mountains the land rises wave-like; in the districts of Nimptsch, Münsterberg, Frankenstein, Schweidnitz, and Reichenbach the finest agrarian lands, and fat soil for wheat, is found, and scarcely a spot is left uncultivated. In the higher parts of the mountains, where the climate is rougher, rye and oats only are grown, and the harvest takes place about a month later.

Upper Silesia is very damp. Enclosed by high mountains, in the form of a horseshoe, it forms, as it were, a reservoir for moisture of every kind, and tremendous showers and rain-spouts are not unfrequent there. The soil is light and alluvial so that the roads are, during the greater part of the year, bottomless; and artificial means for improving them have not yet been employed. The districts of Reybnik and Pless, which are situated in the south-eastern corner of the province, bordering on Hungary and Gallicia, and which are cut through by the Oder and the Vistula, are particularly damp; the soil is scarcely ever thoroughly dry; and the vapours and fogs arising from a multitude of small rivulets, lakes and moors, render the climate extremely unwholesome. Frequent inundations and the indolence of the Slavonian population are unfavourable to a development of agriculture; and scarcely anything but rye and potatoes is cultivated there. The potato-disease is of frequent occurrence. The height of the plains, which is about 600 to 1000 feet above the level of the Baltic, entirely counterbalances the advantage of the southern position; Pless, for instance, is situated in the same degree of latitude as Mayence; nevertheless, the rye harvest there takes place at the same time with that in Pomerania, which is four degrees higher north. Ague, dysenteria, and typhoid fever never die out in these districts, and anthrax is epizootic. They were the seat of the terrible famine-typhus of 1847.

Breslau, the metropolis of Silesia, is situated at the mouth of the Ohlau into the Oder. The town is large, well-built, and rich in commerce and industry of every kind. The

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Southern suburb is the prettiest and most healthy; the interior of the city suffers from the evaporations of the Ohlau, which is often stagnant, and the inhabitants of the northern suburbs feel the neighbourhood of the river. The promenade, which has taken the place of the fortifications which formerly existed here, is of great advantage to the town, and contributes much to keep up the health of the inhabitants. Brieg, in the district of Breslau, is often visited by epidemics, and its neighbourhood has always been distinguished for obstinate intermittent fevers; but it is nevertheless a thriving commercial town Oels, which is near Brieg and belongs to the Duke of Brunswick-Oels, is more healthy. The Cotzengebirge, although not high, is pleasant, and possesses a few pine-leaf-cures. The strong fortress of Glatz is situated in the middle of the Glatzer mountains, on both banks of the Neisse; and the neighbourhood of it is much frequented by pilgrims. Reinerz, celebrated for its whey and its saline and iron waters, is very much visited by patients suffering from pulmonary diseases, but the climate is too rough for consumption. Cudowa, a strong carbonic acid and iron spring, similar to that of Pyrmont, and the cold sulphur springs of Landeck, were already recommended by the old Silesian Physicians for paralysis, gout, hæmorrhoids, but more especially for sterility and fluor albus. Krato von Krafftheim says of it:—"Profecto si tempestive adhibeantur, a moderatis hominibus, plurimum momenti in cura podagrae, modo morbus sit curabilis, afferunt." The neighbourhood of Schweidnitz as well as of Freiburg with its mineral springs of Salzbrunn, Altwasser, and Charlottenbrunnen, is very pretty. Great poverty exists in the weaving districts of the Riesengebirge, as this branch of industry has very much declined. The largest towns there are Hirschberg and Landshut, close to which are the springs of Warmbrunn and Flonsberg; the former, a warm sulphur spring, was already known in the thirteenth century. It was dedicated to St. John the Baptist, and therefore called the Johannesbrunnen. Every day on the feast-day of that Saint, thousands of pilgrims crowded here to recover their health by a draught at this spring, which custom has only fallen into disuse in the beginning of this century. The water was also used for bathing; and gouty and paralysed patients were sent to be cured here. Caspar Hoffmann, who was Physician to the Elector of Brandenburg, says in a letter to Dr. Luther, Physician to the Elector of Saxony, "De Thermis Hirschbergensibus" (1569):—"I have myself seen men and women, who had lost the use of their limbs, carried to these springs, and who after some days' use of them began to walk about with a stick, and were at last able to do so without any support whatever." Patients suffering from ulcers and eruptions of the skin also frequented the spring, although it is said, "that it was not good for every patient afflicted with itch"; and it is also remarked, that "the springs have no favourable influence upon morbus Gallicus." Nevertheless even at the present day, Medical men believe, that Warmbrunn is capable of curing inveterate secondary syphilis; there is no doubt that mercurialism is cured here, but the same cannot be said of syphilis. The Physician just mentioned remarks quite justly, "that patients suffering from lepra, hydrops and asthma experience more harm than good from them"; and it still happens, that the incautious use of the hot bath produces dangerous congestions. At the present time the springs are only used for bathing and not for drinking; but in the sixteenth century, the Doctors of Breslau advised their patients to drink the water, "in consequence of which the podagra and sciatica were discharged by the defecation and the urine."

In the district of Oppeln there is the town of the same name, in which an old Hospital is to be seen, the inscription of which deserves to be noticed by all Hospital directors:—

"Da tua, dum tua sunt; post mortem nulla potestas
Dandi; si dederis, non peritura dabis."

The most unhealthy town in Silesia is the detested garrison of Kosel; it is rendered damp and unhealthy by the innumerable little lakes and ponds in the neighbourhood; and a single night watch is sufficient to give a man ague; the soldiers, therefore, are given to dram-drinking to an enormous extent, which they believe to be the best preventive means against this sickness. The town of Neisse is nearly as unwholesome. In the district of Liegnitz there is the town of the same name, the curiosities of which have been described by the celebrated Doctor Thebesius; and Löwenberg, the chronist of which, Sutorius, is the only Silesian author who speaks of the English sweating sickness. He remarks on this:—"In the year 1529 a strange disease appeared in Silesia, called the English sweating sickness; whoever lived twenty-four hours after having been attacked by it was saved."

THE POPULATION.

The population of Silesia is a mixture of German and Slavonic races. It is probable that when the Eastern nomad tribes poured in from Asia and the East of Europe, and occupied Poland, Silesia was also overrun, and the Autochthon population driven back, by them. To this day Slavonic names of places are retained in the mountains. Under the Saxon and Francon Emperors a *contre-coup* took place, and Saxony and Thuringia furnished the German element of colonisation. With the exception of one part of Upper Silesia, the German language predominates throughout the country; but the right bank of the Oder bears a Polish aspect, and it is generally called the Polish side. The name Silesia is said to be derived from the Polish word *siecazi*, which signifies vagabonds and interlopers; others will have it that an autochthon tribe, the Selingers, gave the name to the country; in the provincial dialect the inhabitants call themselves Schlesingers, and the Zobtenberg was formerly called Mons Silensis.

The Silesians are an honest and straightforward people, and fond of art and science. The Silesian schools have always had a good reputation. Numerous names, well-known to the student of history, show the industry and learning which have flourished here. As far back as the thirteenth century, the "Compendium Salernitanum" was known here; and a well-furnished apothecary's shop is said to have existed in Schweidnitz, in 1264. The oldest Silesian monuments of literature are the works of Thomas Bishop, of Sarepta, a monk, who lived in the convent of Breslau in the middle of the fourteenth century, and was for a long time Chaplain and Physician to the Duke Boleslaus of Liegnitz. Among other books he wrote a "Practice of Medicine," a compilation from the works of the Salernitan school. Among Silesians who have distinguished themselves in Medicine, I may mention the name of Johann Lange, who died in 1565, and was one of the most learned men of his time; he was Professor at Heidelberg, Physician to several Electors of the Palatinate, and author of works on syphilis, which are important for the history of that disease, and have never yet been made such use of as they deserve; Krato von Krafftheim, a pupil of Luther and Melancthon, who, by the advice of the former, studied Medicine under Montanus in Italy, and was a strong upholder of Protestantism at the Imperial Court, to which he was Physician; he flourished about 1560, and studied Medicine in the genuine spirit of Hippocrates; Andreas Dudith, a Privy Councillor of the Emperor Ferdinand I., who, by his Medical letters, contributed much to a more general adoption of more enlightened views on Medical subjects, and who died in 1589; Jacob Horst, Professor at Helmstädt, who is chiefly known by his treatise on the golden tooth ("De Dente Aureo"), with which a boy was said to have been miraculously born in Silesia; the controversy on this subject, which he had with a Scotch Doctor, Duncan Liddell, excited the most intense interest in the learned world at that time; Gaspar Schwenckfeldt, who is author of the first Flora and Fauna of Silesia, and gave the first description of Warmbrunn; Jessenius von Jessen, Professor of Anatomy at Wittenberg, afterwards Rector of the University of Prague, friend of Tycho de Brake, and decapitated at Prague for political conspirations; Daniel Lamert, also Professor at Wittenberg, and the first who described scarlet fever; Gottfried Purrman, the first Surgeon of his time, Army Surgeon to the Great Elector of Brandenburg, who made, during the war with Sweden, more than seventy trepanations, and whose most remarkable success was the cure of a leprous patient by transfusion of blood; Bucretius, or Rindfleisch, who edited the anatomical plates of Casserius; Justina Sigmundin, the celebrated midwife to the Court of Brandenburg, who published the first Treatise on Midwifery in 1690; Margaret Fuss, another midwife of great reputation, who attended the Duchess of Liegnitz, and was called to the Courts of Holland and Denmark; Balthasar Tralles, eminent both as a philosopher and Physician, who protested against the materialism of Hobbes, and wrote a classical treatise on opium, which appeared at the same time with Young's

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treatise on opium, which was published in Edinburgh in 1756; and, finally, Christian Gottfried Gruner, Professor at the University of Jena, and distinguished for his works on the History of Medicine, and especially on the English sweating sickness.

These are only a few of the best known names of members of our Profession, at the side of which many others of equal fame in other branches of science and literature might be placed; thus for instance, the philosophers Wolff and Garve. The Silesian schools of poetry are well known to every student of German literature, and the predilection of the people for this art was so great, that many doctors have gone so far as to describe diseases in verse. The Medical observations of the middle ages, in monks' Latin, are mostly written in Leonine verse, after the model of the Salernitan school. The religion of the people has a somewhat mystical taint; the mystic cobbler, Jacob Boehme, has a world-wide renown; Dr. Knorr von Rosenroth was a warm adherent of the Rosenkreuzers and of that mystical Paracelsic Medicine, the most celebrated representative of which in your country was Fludd, who lived in London in the seventeenth century.

I conclude this letter with a few remarks on the *physique* and the food of the Silesians. They are generally of middle stature, and only in some parts of Upper Silesia are tall and robust people to be met with; in some of the villages there nearly every man might be enrolled in the Guards, while in other neighbourhoods, especially in the mining districts, the people are short and anæmic. Those who live in mountains are generally thin and slender, and in the weaving districts where there is too frequently a want of sufficient nourishment, they have a withered and worn appearance. In the sandy districts of the right bank of the Oder the people are lean, but hardy. The Breslauers are by no means handsome; the women are particularly plain, and often scrofulous and lymphatic; their noses are the worst part of them. In Upper Silesia the women are much prettier. Casper states, that on levying troops in the four eastern provinces of Prussia, it was necessary to reject 3394 in Silesia, 2642 in Pomerania, 1630 in Brandenburg, and 1552 men in Saxony on account of their low stature. Those rejected on account of both mental and bodily defects were most numerous in Saxony, after which came Brandenburg, Silesia and Pomerania. Concerning the mortality in these four *corps d'armée*, Casper puts it at 1·101 in Saxony, 1·87 in Brandenburg, 1·80 in the Guards at Berlin and Potsdam, 1·77 in Silesia, and 1·59 in Pomerania.

The Silesians have always been known as great eaters. On account of the high price of butchers' meat, this is now much less eaten than formerly, and the people are therefore obliged to satisfy their voracity with inferior kinds of meat, especially sausages and pork, which are eaten together with sauerkraut and dumplings; the people do not much care for the quality of the food, provided they have plenty of it. The cookery is, generally speaking, bad; but the Polish and Hungarian custom of highly spicing their food is not altogether unknown. The ideal of the Silesians is pork with apples and dumplings. In the country pork is the commonest food, and is often eaten for weeks together without change. The bread in most towns is bad, and mixed with beans, peas, and barley, which make it sticky, heavy, and indigestible; in the country good bread is scarcely ever found, while in some districts the people have no bread at all, and eat a half-raw mixture of rye and wheaten flour. The potato is the staple food of the lower classes: the bad harvest last year has again produced great distress in Upper Silesia, and another famine-typhus was dreaded in consequence of it. The people then dragged out the frozen and rotten potatoes in order to bake them into bread. In some of the poorer districts of Upper Silesia the people live no better than animals, with which they eat, sleep, and drink in common; they are dirty, with scarcely any clothing, little food, and live in miserable, half-decayed huts, which are full of pestilential vapours. A sour soup, with rye flour and milk, is considered a great dainty by them. In this corner of Silesia there still exists much mediæval barbarism and fanaticism; and the people will spend their last penny in spirits, which accounts for much of the misery and suffering which prevails. The state of civilization in certain districts can be measured by the consumption of spirits, which increases the nearer we approach the Slavonian population. Not more than a hundred years ago, noblemen not unfrequently died here from excessive dram-drinking. Twenty years ago, nine to ten millions of quarts of spirits were annually consumed in Upper Silesia. It is a pity that beer has not yet been able to displace spirits. A really good beer is only met with in the mountains, where the water is good. In the towns, much so-called Bavarian beer is drunk, but it is a spurious beverage, the bitterness of which is artificially produced. The common beer is very poor; so that the lower classes will combine its use with dram-drinking. Some centuries ago an excellent beer was brewed here which was called "schoeps," and which inspired the following verses:—

> "O Schoeps, O Schoeps, te libenter bibit omnis plebs,
> Schoeps caput ascendit, nec scatis indigot ullis;
> Sessitat in sternis, mirabilis intus in hirnis.

But schoeps has now departed, never to reappear.

BOHEMIA.

Karlsbad, May 8.

Whoever is unaware that Karlsbad is not a "fashionable watering-place," but rather a large European Hospital founded by Nature, to which patients flock from all countries, might learn this on visiting us at the present time. At a temperature scarcely above freezing point, we see every morning a considerable number of persons, thickly enveloped in cloaks and furs, hastening to the springs, and their yellow, green and haggard faces, upon which disease has left its mark, show that those persons have only come here for the relief from their sufferings which they had vainly sought elsewhere. The fourth list of patients and visitors, which was published to-day, contains the names of nearly 400 patients who are now residing here. Half that number had already arrived in April, and some came even as early as March and February. In 1858, Karlsbad celebrated its 500th anniversary, and the constancy with which it is visited, and the continually increasing number of patients, gives evidence of the prominent position it occupies amongst the spas of Europe. Karlsbad has often been called the "King of Springs," and this title has its foundation as well in historical right as in universal suffrage. The manifold revolutions we have witnessed in Medical science, the most thorough changes of our pathological and therapeutical views, have not been able to lower the high esteem in which Karlsbad has always been held. Last year the number of visitors amounted to 10,000, who came not only from all European countries, but also from the most distant parts of the globe. It is surprising that amongst this number there were only 97 patients from Great Britain—an extremely small proportion when compared with other countries more distant and more out of the way. There were, for instance, 688 Russians and nearly 200 Swedes and Norwegians. The small number of visitors from your country, which, not only at home but also in the colonies, contains so many patients for whom Karlsbad is the best and, in some instances, the only cure, and for whom certainly the distance can be no objection, can only be accounted for by a want of knowledge of the curative effects of these springs, which I will do my best to fill up.

Karlsbad is now, if not immediately connected with, at least, very near, the great European network of railways. Schwarzenberg, about thirty miles from Karlsbad, branches off from the great lines, which penetrate the north and west of Europe. Travellers who come here either by Frankfort or Leipsic, had best go by rail as far as Schwarzenberg, from whence a pleasant drive through a beautiful valley brings them to this place, which is, as it were, imbedded in a hollow valley surrounded by mountains on three sides, and only open towards the south and south-west where it is connected with the fertile plains of Eger. No doubt, powerful revolutions of nature lifted the mighty granite rocks which shelter this place, and paved the way for the meteoric water into that layer of the earth, from which it again rises as mineral spring, impregnated with the high temperature of the depth from whence it comes.

The number of thermal springs which come out at Karlsbad is very large. There are nine now used for drinking and bathing. Warm water vapours rise out of the cellars of most houses; and wherever, in the course of the river Tepel, which flows through our valley, borings are made, new thermal springs spout out immediately, before many feet of ground have been penetrated. All these springs, those which are used as well as those which are not, have their origin in one

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common and large reservoir, which has its bed in the river Tepel. A number of years ago, on the occasion of the residence amongst us of M. Berzelius, a minute examination of this reservoir was made. It was then found to be roofed by three layers of sprudelstein, a lime deposit of the water, which has built this roof three stories high; they are similar to three watch-glasses turned with the convexity downwards; the layers lie one above the other, and are separated from each other by sprudelsteingerüst, which is one or two feet thick. By means of these stony beams each story is divided into several cavities, lying close to each other, honeycomb fashion. In many places they communicate with each other, and with those of the lower stories. After the lowest story had been bored through, a large and violently agitated reservoir of water was arrived at, the bottom of which could not be sounded. In accordance with their common origin, all the springs of Karlsbad have the same chemical composition, and they differ only in temperature, which varies from 117·5° Fah. to 162·5° Fah. The springs, which are close to the bed of the river, and are violently thrown upwards from their common reservoir, have the highest temperature. Those which break through the surface of the earth at a distance from that, and have to make a long subterranean journey before they come to light, are of a lower heat. The highest temperature is possessed by the Sprudel, 162·5° Fah., and the lowest by the Marktbrunnen, viz., 117·5° Fah. The cooler springs contain traces of carbonic acid, which evaporates in the hot springs on account of their high temperature. This small amount of carbonic acid is the only difference in the chemical composition of all the springs, in quality as well as quantity. The springs are, therefore, spoken of as hot and cool, and not as strong and weak.

The most fantastic theories have for a long time been circulated concerning the physiological effects of these springs, without their being in any way based on experience. The grand and imposing manner in which the Sprudel spouts out of the earth, the incrustating power of the water, and finally, the striking curative effects of it, affected the imagination of Physicians and laymen in an equally powerful way, and the water was, therefore, endowed by them with the most wondrous qualities. Some maintained that it was very exciting. The most fiery wines were not to be compared to this volcanic water; with one tumblerfull of Sprudel a stream of that subterranean fire was introduced into the system and rolled through the veins, where it might cause the most destructive effects, the least dangerous of which was apoplexy. Others compared the water with iodine and mercury, and asserted that the absorption was so quickened by it, that, if it was incautiously used, the whole system might be absorbed by it, and would disappear like a Kilkenny cat; especially if in using it a fault in the diet was committed. I have heard it related by two faithful *habitués* that a man, after having taken a glass of Sprudel and eaten two cherries upon it, died immediately afterwards. The post-mortem examination showed two stones in the stomach; and it was, therefore, evident that the water had petrified the cherries!

A sober observation does not perceive any of these marvellous effects. It is certain that the Karlsbad water accelerates circulation in some measure, as every warm beverage will do, merely by its high temperature. This is, of course, more striking if the hot springs are used. The function of the skin is excited, and perspiration increased. They have only a trifling effect upon the kidneys. The function of the intestines is moderately excited, but a really laxative effect is only produced by them in very rare cases, and when the intestines are extremely sensitive to chalybeates. This was, until recently, the whole sum of the experience made by Physicians, who had collected observations on the physiological effects of the water. Within the last few months, however, our knowledge in this respect has been greatly enlarged by the researches of one of the most eminent Physicians of this place, Dr. Seegen, who is favourably known in Germany by his excellent and learned treatise on mineral waters, and who is Professor of Balneology at the University of Vienna. During his stay in Vienna last year he made, in the Garrison Hospital of that city, a series of experiments with Karlsbad water on seven soldiers, and subjected the urine excreted by them to a quantitative analysis for nine days before the water was administered, and for nine days while it was being given, the other conditions of the men—food, etc.—remaining unchanged. The most important results of these researches, which have cost our colleague much time and trouble, are the following:—

1. During the use of the water, uric acid almost entirely disappears from the urine. It is diminished within the first few days, and at a later period only traces of it are found. It becomes probably more highly oxidised, and is, therefore, excreted as urea.

2. The excretion of urea is considerably diminished; that is, for about two grammes a-day. This being the standard for the metamorphosis of albuminous matters in the system, diminished excretion of urea is equivalent to a retarded metamorphosis of them.

3. Large quantities of alkaline phosphates are excreted. These salts being essential constituents of the blood-globules, the increased excretion of them seems to show that the Karlsbad water has a remarkable effect upon the most important elements of the blood.

From these results it appears that the curative effects of the Karlsbad water in gout and lithiasis renalis are chiefly to be explained by the increased oxygenation of uric acid in the blood. If there is an anomalous accumulation of uric acid in the blood of gouty patients, as has been proved by the researches of Dr. Garrod, it is easy to understand why a means which induces a more considerable oxygenation of uric acid, will best counteract the accumulation of it in the blood, and the further progress of the gouty process. The discovery that the metamorphosis of the nitrogenous tissues is diminished by the use of the water, is also of much practical importance, as it proves that the reluctance to prescribe the water in delicate, weak, and decrepid individuals has no reasonable foundation. The water does not increase the metamorphosis of matter, but, on the contrary, retards it, and economises the most important elements of the body. The reason why there should be a diminished metamorphosis of these substances is evidently that the water excites a lively combustion of fatty matter; so that the therapeutical experiences which have been made here, over and over again, viz. that the use of Karlsbad counteracts an accumulation of fat in the system, and that diseases connected with anomalous formation of fat find their best remedy here, are now easily to be understood.

It is quite evident that only physiological researches of the kind just alluded to are able to give us an insight into the effect of mineral waters generally, and to found the indications for the use of the springs upon solid scientific bases. There are just now many men in Germany assiduously labouring in this field; and we have good reason to hope that balneology, or hydrology, however you may call it, will soon take its rank amongst the exact natural sciences. Besides these physiological researches, it is, of course, chiefly the therapeutical experience in patients which must guide us in determining the indications for the use of the springs; and on these I purpose to discourse, as briefly and concisely as possible, in my next letter.

GENERAL CORRESPONDENCE.

ESSENCE OF BEEF *versus* BRANDY.

LETTER FROM DR. DRUITT.

[To the Editor of the Medical Times and Gazette.]

SIR,—Will you let me say a few words on the subject of "Essence of Beef" in reply to several private communications, as well as to a letter which appeared in your Journal last week.

The article in question is by no means a new discovery. It is one of the old devices of cookery, and was in use when I was a schoolboy. I have used it in practice for years, and know that it has been used by others. I published a formula for it in the "Surgeon's Vade Mecum," in 1853, and, therefore, whilst desirous of promoting the use of it, never claimed priority, nor suspected that anyone would raise questions about it.

When meat, chopped up, and put into a closed vessel (such as an earthen jar, with a cover, sealed up with flour paste, and tied up in a cloth), is boiled or baked for an hour or more, it undergoes separation into three portions,—fat, solid fibre, and liquid essence. The last is easily strained off, and the fat separated by blotting-paper. It is, when nicely made, a clear, amber liquid, of a very meaty, aromatic smell and taste; but, as will readily be imagined, the quantity obtain-

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able from a given weight of meat varies infinitely as the quality of the meat and the proportion of pure muscle, in contradistinction to sinew, varies. When made from old meat, it is darker; when from young meat, lighter; and, in this latter case, becomes gelatinous when cold. Almost one-fourth of its weight is yielded by ordinary meat.

Evaporated to dryness, it yields about one-sixteenth of solid residue; but this varies likewise.

The object of this preparation, in contradistinction to common soup or concentrated beef-tea, etc., is, to administer the purely stimulating elements of meat in a separate form. If all the soluble constituents of meat be extracted by boiling water, a gelatinous extract is obtained, far better adapted for most cases, whether in health or sickness; for the gelatine of meat has a very high nutritive value. But there are cases in which we wish to stimulate, and in which the stomach loathes a quantity of gluey matter, and for such cases this essence is adapted.

The object of my bringing it under the notice of the Obstetrical Society was to advocate the use of it as a partial substitute for brandy, in the treatment of the consequences of hæmorrhage, and other states of exhaustion incidental to the puerperal state. It will not supply the place of brandy during the early and urgent stages of exhaustion from loss of blood, though even then it is the best auxiliary, but it does very largely supply the place of an alcoholic stimulant in the treatment of the after stages, when the brain is suffering from anæmia, and when the patient complains of headaches, giddiness, and despondency, particularly in the early part of the day. It is equally valuable in states of mental depression arising from other causes, such as grief, mental shock, etc., in which the usual resort is to wine or brandy. It may be taken as a stimulant after breakfast, at the time of the day when nervous feelings are most distressing, and when alcoholic stimulants are most pernicious, and most likely, if used at all, to lay the foundation of injurious excess. Out of the vast number of drunkards, there are a few whose intemperance has followed the use of wine for the relief of mental depression caused by anæmia. Bodily weakness alone does not tempt to drinking, except when it is attended with mental despondency; but with that combination it does tempt most strongly. But the essence of beef, freed from the grosser gelatinous particles, is directly absorbed, and exhilarates the brain specifically, causing the same phenomena in slight degree as brandy does. It is in cases such as this, as a substitute for brandy, and as a means of preventing habits of drinking, and of curing them, that I more particularly recommend its use to my Professional brethren. One tablespoonful taken early in the forenoon, with or without a little bit of crust and a mouthful of wine, gives the brain a something that relieves it from nervousness and vapours. It should be given, not as food at meals, but in the guise of medicine, between them.

In dyspepsia, likewise, it is a capital remedy, and one infinitely preferable to pepsine, as I venture to think. There are very many cases of general debility and emaciation in which a gelatinous soup is preferable; but in the cases in which a nutritive stimulant without bulk is required, as in that hopeless disease called "old age," your readers may find that this liquid is a valuable addition to their stock of remedies. It may, if required, be flavoured with a little dill water or camphor, and administered out of a medicine bottle.

I am, &c. R. Druitt.

London, May 27.

CHLORATE OF POTASH AND SUGAR IN PHTHISIS.

Letter from Dr. J. Turle.

[To the Editor of the Medical Times and Gazette.]

Sir,—I have but just observed amongst your last week's "Excerpta Minora" an extract from the *American Journal of Medical Science* for April, recording the favourable opinion formed by a Dr. Fountain of the employment of large doses of chlorate of potash in phthisis. I hasten to corroborate this opinion by the results of my own experience. I have been in the habit, during the last two years, of giving a very strong solution of this salt, almost *ad libitum*, in tubercular affections. The proportions I use are one ounce to three pints of boiling water.

In the early part of this year I mentioned the subject to Dr. Garrod, who expressed an intention of making a trial of this treatment in suitable cases in the wards of University College Hospital. If he has done so, his results will be of far more value than the more limited scale on which I have tried it.

Since the end of 1859 my practice has been to combine the administration of from one to three or four ounces of the chlorate per week with the use of three or four pounds of sugar during the same period. When the patient has a dislike for sweets, I substitute the sugar of milk, on account of the little taste of this variety.

Of about twenty cases of confirmed phthisis which have been under my care since the beginning of 1860, the only one which terminated fatally was that of a lady who, from first to last, expressed a most unaccountable repugnance to the taste of the drug, though this is, in comparison with other medicines, very slight, from the small amount water will dissolve. I have, however, found the same objection preclude its use in the case of two other female patients. In but one of the favourable cases had the disease reached the third stage; but in that (the daughter of a tradesman in Portland Town) there was a very large vomica in the right lung, and at the time I commenced the chlorate she was so exhausted by hæmoptysis, hectic, and diarrhœa, that none of those who saw her, including myself, supposed she could live above a day or two. The tone of the stomach was rapidly restored, although there had been nothing like appetite for weeks previously, and her recovery of comparatively good health was uninterrupted. Her general health continued excellent six or seven months subsequently, although she was then described by a Surgeon at Brighton as having but one lung left. This young person had been formerly an out-patient at University College Hospital under Dr. Hare. The same gentleman was consulted in another of my cases: that of a man in whom there was very extensive solidification of the upper part of both lungs, with hæmoptysis, and all the other symptoms of rapidly-advancing disease, with softening. His father and all his brothers and sisters had died young, of consumption, and Dr. Hare of course corroborated the very grave prognosis I had given. Cod-liver oil was ordered, but could not be borne by the stomach. Within four weeks of being put on the treatment above described, not only had the emaciation, which had been very great, ceased, but he insisted on leaving off part of the allowance of sugar, on the plea that he was getting too fat. He soon resumed his employment, that of a master blacksmith, and has not since been laid up. I mention these two or three cases to show some of my reasons for thinking favourably of the simultaneous exhibition of these two agents. I have a crude theory on the *modus operandi*, the exposition of which I shall defer to some other occasion when less pressed for time. For the present, I shall be satisfied if these hurried jottings should influence some who have the opportunity to make the trial on a larger scale.

I am, &c.

James Turle.

Boundary-road, N.W., May 27.

THE LIVERPOOL FEVER AT ALEXANDRIA.

Letter from Dr. Ogilvie.

[To the Editor of the Medical Times and Gazette.]

Sir,—I see from the last monthly part of the *Medical Times and Gazette*, which has come out by this mail, that a good deal of notice has been attracted among the Profession at home by the recent epidemic of fever at Liverpool, immediately following the arrival there of an Egyptian frigate. The same crew, as you are aware, transshipped into another vessel, touched at Malta on their return here, and left behind them a fever of a malignant type, of which several persons have died. The consequence was a violent panic in that island, and, for a time, a very uneasy feeling here, when these occurrences became known.

One or two facts, supplementary to your account, may be acceptable to your readers. On the arrival of the steamer in this port, some twenty-eight or thereabout of the crew were admitted into the native Hospital for rheumatism, meningitis,

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dysentery, and other non-contagious diseases, but not one with typhus or other contagious fever, of whom five or six (for I cannot at this moment give you the exact number) have since died. Of seven Englishmen on board, six were affected at the time of landing, or immediately after, with fever, but in different degrees of intensity. In two it was slight, and did not even require confinement to bed. In three the symptoms were marked, and necessitated a treatment of from one to four weeks' duration in Hospital. In all of these cases, the type of the fever was rather inflammatory than typhoid, and in all there was a degree of fidgety, restless excitement and affection of the nervous system, quite out of proportion to the other symptoms. In the milder cases this scarcely could be said to amount to delirium. In the one remaining case, and in it only, did any symptoms of true typhus appear, or anything leading to a suspicion of a contagious type of fever. It was the only case also in which, during the treatment, I apprehended any serious danger to life. This patient was a rather delicate lad of 17, who left the vessel slightly indisposed at Malta, came on two days later by another steamer, landed here labouring under premonitory symptoms of fever, was admitted at once into Hospital, and within forty-eight hours presented small but well-marked petechiæ. He and all the other Englishmen have made good recoveries, and are now in excellent health. It is further satisfactory to be able to add that, up to this time, I have been able to learn of no case of sickness, either in the Hospitals or in the town, traceable to the crew of this unfortunate steamer, although it is now forty-one days since she arrived here. So ends, I hope, this strange, eventful history.

The circumstances are being inquired into by the authorities here, and I may be able, by-and-by, to give you some further details. I am, &c.

J. F. Ogilvie, M.D.,
Surgeon to H.B.M.'s Consulate, and Member of the Board of Health.

Alexandria, May 17.

CONSULTATION WITH HOMŒOPATHS.

[To the Editor of the Medical Times and Gazette.

Sir,—What is really meant by consultation with Homœopaths? What is it which takes place at these incongruous interviews?

If any member of our Profession calls in, or desires consultation with, or acts upon the directions of a Homœopath, he is surely deeply culpable, and deserves all the censure that his brethren can inflict. Or if a Homœopath call in a Physician or Surgeon for the purpose of white-washing himself and saving his own reputation from the fruit of his own misdeeds—suppose, for example, that a homœopathically-treated patient is dying, and Mr. A. or Dr. B. is called in at the last moment to make things pleasant, and assure the relatives that "everything has been done to save life,"—then no amount of fee should bribe any honourable man to call evil good, and no Professional position or status ought to secure the Physician or Surgeon from open contempt if he conceal his disapprobation of Homœopathy.

But let us suppose a Homœopathic Practitioner to call in a Physician or Surgeon in order that he may prescribe in any given case; or suppose the friends to insist upon calling him in, and that the Homœopath desires not to give up the patient, but to continue his attendance. Surely in such a case there can be no earthly reason why he should not give his opinion and issue instructions, and continue his attendance if his instructions be observed. Homœopaths, in seeking consultations with Physicians, stultify themselves and abandon their position, which is, that common medicine "cannot," in the nature of things, do good. If they continue in attendance and look on, that is not our concern: we do not invite them; but surely I, if I believe my treatment will save a man's life, am not justified in refusing to treat him because he has tried Homœopathy, and still has a Homœopathist hanging about the house. A Homœopath is to me the same as a non-professional looker on. If he can give me information I take it; but I do not allow him to interfere in the treatment. That is *mine*, not his. *I* take the responsibility, but do so only on condition that my orders are obeyed. Morality and humanity demand that we should give our services to the sick, and continue them so long as our treatment is obeyed. We, of all people, are not to punish our fellow creatures because they have been deluded by Homœopathy, nor yet for erroneous opinions of any sort.

There is yet another category of cases. Mr. A., who is attended by a Homœopath, desires Mr. B. to cut him for the stone; or Mrs. C. requests the attendance of Dr. D. in her confinement. The answer seems clear. We have nothing to do with a patient's past or future; but if she will obey us for the present, and do and take what we order in the particular matter, in which she throws the responsibility on our shoulders, that is enough. If a Homœopathic patient is flooding, or bleeding from the femoral artery, can any one of us refuse to go if sent for? Certainly not; and we shall be injuring our Profession if we allow our resentment of an absurd quackery to interfere with our plain duties.

Besides, it is a mistake to treat things too seriously. A patient of mine is always dosing her children with globules. If they are ill she sends for me. I prescribe, and my directions are obeyed; but I know that Dr. Globule comes in the evening, and that his sugar plums are taken alternately with my rhubarb; nevertheless I don't care; he never interferes with me; and it would be a sad waste of breath to argue the folly of such a proceeding with my patient. My theory is, "That it pleases she, and don't hurt me," as the Cornish miner said when his wife beat him. See also Matt. vii. 12.

I am, &c.

London, May 18. Tranquillus.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

Tuesday, May 21, 1861.

Dr. Copland, President, in the Chair.

Dr. Peacock, for Dr. Montgomery, reported on a specimen of

CALCIFIED TUMOUR FROM THE ABDOMEN.

After careful examination Dr. Montgomery had arrived at the opinion that the tumour in question was an uterine fibroid. In this opinion Dr. Bristowe also coincided. Dr. Peacock stated that he had since the last meeting received additional particulars from Dr. Thurnham, of Devizes, by whom the specimen had been sent. Dr. Thurnham still adhered to his first view, that the tumour was developed in the ovary, and not in the uterus.

Mr. Hutchinson, for Mr. Henry Thompson, Mr. Lawson, and himself, reported on Dr. Fiddes' specimen of

CANCER OF THE TONGUE.

The specimen consisted of the entire tongue, which had been successfully excised on account of an ulcerated cancer in its right side. Mr. Hutchinson stated that there could not be the least doubt as to the disease being epithelial cancer. The histological elements were most characteristic. The ulcer was about the size of a shilling, and occupied a surface on the right side of the organ, about three quarters of an inch from the tip, extending backwards. On section a disk of firm whitish growth was seen abruptly margined below, and not extending deeper than about the third of an inch. No deposits of cancer could be found in any other part of the organ.

Dr. Hare exhibited a specimen of

ENLARGED THYMUS GLAND FROM A CASE OF LARYNGISMUS STRIDULUS.

The preparation, which consisted in a greatly enlarged thymus, had been removed from the body of a child, which had died in a paroxysm of laryngismus, having previously suffered from many similar ones. Dr. Hare stated that he brought it forward rather as illustrating a coincidence, than from any wish to imply that there had existed a causal connexion between it and the laryngismus. The old view which connected the two closely together, was, he thought, now generally abandoned. He mentioned one or two other cases which had recently occurred under his own care, in which

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death from laryngismus had taken place, there being no enlargement of the thymus whatever.

Mr. BALLARD showed some casts from cases of

DEFORMED JAWS.

He brought them forward to illustrate the influence of the long-continued habit of sucking the thumb, in altering the position of the teeth and the form of the jaws. The casts showed the lower teeth pushed inwards, and the upper ones outwards, the arch of the palate being unusually high.

Mr. LEE inquired of Mr. Ballard as to the age at which he considered the habit most prejudicial.

Mr. BALLARD replied that the longer it was continued, the more marked and prejudicial were its consequences.

The PRESIDENT stated his conviction that the subject was an important one, and well deserving the attention of the Profession. He agreed with Mr. Ballard in thinking that the habit of "fruitless sucking" was very injurious to the health of children, and one which Medical men should warn parents against permitting.

Dr. BUCHANAN showed specimens of

HYDATIDS IN THE LIVER.

The patient had died of other disease. The spleen showed abruptly margined masses of induration of the kind usually supposed to depend on plugging of the vessels by detached fibrin from the heart. The aortic valves showed recent deposits upon their surfaces. The hydatid cyst was a single one, and not of very large size. It contained numerous hydatids, from the size of a large marble to that of a pea. It had not caused any symptoms. The hydatids were pellucid, and had no doubt been living up to the time of the examination.

Mr. HENRY LEE showed some specimens of

BRANCHED COAGULA IN THE PULMONARY VEINS.

The specimens had been removed from three different patients, and were illustrated by drawings. They showed fibrinous coagula of unusual extent and strength, moulding themselves on the cardiac valves and extending into the arterial ramifications. In some they existed in both chambers. Mr. Lee believed that these formations were usually found in cases of death from blood-poisoning, and considered that they formed during life. In one case their presence had been diagnosed some considerable time before the death of the patient.

Dr. BRISTOWE questioned the correctness of Mr. Lee's views as to these coagula having anything to do with poisoning of the blood. He thought they were very commonly met with in cases in which death had taken place slowly.

Dr. DICKENSON brought forward a specimen from a case of

BRONCHOCELE, FATAL BY COMPRESSION OF THE TRACHEA.

The patient, a lad aged 18, had been under care in St. George's Hospital on account of a bronchocele of moderate size which had occasioned great impediment to respiration. Tincture of iodine externally was used and with some benefit. The difficulty of breathing chiefly occurred during sleep, when he would make a peculiar sibilant snoring sound which much annoyed other patients. No immediate urgency was apprehended until the night of the patient's death. On that occasion he started up suddenly from sleep and exclaimed that he was being strangled. The House-Surgeon was promptly on the spot, but before tracheotomy could be performed the patient was quite dead. The autopsy showed a very firm bronchocele firmly fixed to the trachea and compressing it laterally. The sides of the tube were so compressed and presented convex surfaces inwards, that the width of the aperture left was in some parts not more than the eighth of an inch. Dr. Dickenson wished to ask the members present whether they had met with any parallel cases?

Dr. BRISTOWE had seen one almost exactly similar. The patient died in the same manner. He believed that the specimen was now in St. Thomas's Hospital Museum.

Mr. HEATH also recollected a similar case. The patient died in King's College Hospital, and as in Dr. Dickenson's case, so suddenly, that tracheotomy could not be performed.

Dr. HARLEY exhibited a

DIPHTHERITIC CAST OF THE TRACHEA.

It had been sent to him by Dr. Newman, of Fulbeck, having been removed from the trachea of a child which had died on the sixth day of a severe attack of diphtheria. It had appeared to be improving, when it had suddenly relapsed. The disease had affected three members of the same family, but the other two recovered. The specimen showed a coherent cast of the trachea and larynx, the material being remarkably tough and strong. Dr. Harley stated that he brought it forward chiefly to demonstrate what he had several times before observed—that diphtheric membranes usually consisted of coherent cells without any fibrillating material whatever. (Drawings from the microscope were exhibited showing numerous cells and granules, but no fibres.) Dr. Harley had, he stated, examined several specimens of diphtheric membranes, and always with the same result.

Dr. BRISTOWE remarked that he had had occasion to examine a good many diphtheritic exudations, and had never failed to discover a matrix consisting of very minute fibres arranged in a sort of network.

Dr. HARLEY was much interested in hearing the results of Dr. Bristowe's observations, and thought they went to show that there were two forms of diphtheritic exudation—one fibrinous and one cellular only. In reply to a question from Mr. Ballard, he said that he did not consider the cells to be merely those of mucus. He thought that they approached more closely to those of inflammatory exudation.

LEGAL INTELLIGENCE.

COURT OF QUEEN'S BENCH, WESTMINSTER, MAY 25.

(*Sitting in Banco, before Lord Chief Justice* COCKBURN, *and Justices* WIGHTMAN, CROMPTON, *and* BLACKBURN.)

EX PARTE GUTTERIDGE.

Mr. Thomas Gutteridge, in person, moved for a rule calling upon the Royal College of Surgeons to show cause why a *mandamus* should not issue commanding them to admit the applicant to the rank of a Fellow of the College. He stated that he resided at No. 43, Calthorpe-street, Birmingham, and had been admitted a member of the Royal College of Surgeons so far back as 1827, and he had in November last, applied to be admitted to the rank of Fellow, a rank to which he considered he was entitled under the charters of the College. The election was held on January 10, 1861, when his application was read, and a ballot took place, but he was not elected. Not being present on the occasion, he was not aware upon what grounds he was not elected, but he said a person named Joseph Hodgson was present, who had for many years shown a most rancorous and implacable spirit towards him, and he believed that Mr. Hodgson had used undue influence to prevent his being elected. It was admitted by the College that his application had been made in due form, but they declined to state upon what ground he was not elected. The applicant proceeded to give the history of the College, and began with the barbers, who in the time of Edward IV. exercised the mystery of Surgery in the city of London, and whom Edward IV. incorporated in one body.

Lord Chief Justice COCKBURN said it would be of more importance for the applicant to read to the Court the words of the charter under which elections took place.

Mr. GUTTERIDGE then referred to the Charter of the 40th of George III., and subsequent charters, to show that the object was to encourage the art of Surgery. By a charter granted in 1843, Her Majesty authorised the election of from 250 to 300 Fellows out of the members as the Council might think proper, upon their passing an examination; and, by a charter of the 16th of Her Majesty, the Council was empowered to appoint any member of the College of 15 years' standing to be a Fellow, without examination, such appointment to be determined by vote or ballot of the Council, and to be decided by the majority.

Mr. Justice CROMPTON said the Court might grant a *mandamus* to the Council to take the vote or ballot; but they could not grant a *mandamus* to tell them how they ought to vote.

Mr. GUTTERIDGE said his object was to ascertain how the members of the Council had voted, and the reasons of their vote.

Mr. Justice CROMPTON said the object of the ballot was

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that the voting might not be known. How could the Court enquire into it?

Mr. Justice WIGHTMAN said the applicant could only be admitted after the ballot, but the ballot had taken place and was against him.

Lord Chief Justice COCKBURN said the election could only take place by ballot, and the answer to a *mandamus* would be that a ballot had been held.

Mr. GUTTERIDGE then applied that he might have an inspection of the minute-book to ascertain who voted.

Mr. Justice BLACKBURN said it was optional, not compulsory, for the Council to elect a Fellow—and the Council was not bound to give a reason for rejecting any one.

Lord Chief Justice COCKBURN said the object of the Charter was to empower the Council to exercise their power without restraint, except upon their own consciences.

Rule refused.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND (a).—The following Members of the College, having undergone the necessary Examinations, were admitted Licentiates in Midwifery at a Meeting of the Board on the 22nd ult.:—

Name.	Place.	Date of Diploma.
Garnham, D. J.	Lowestoft	April 16, 1861
Johnson, C. N. H.	Winchester	January 30, 1861
Kidd, H. A.	Calcutta	April 30, 1861
Ninnis, B.	Surrey-sq., Old Kent-rd.	April 18, 1861
Phillips, G. B.	Clapham	April 19, 1861
Smart, J. N.	Southville, Bedminster	April 11, 1861
Smith, G.	Birmingham	August 15, 1849
Whitmarsh, W. M.	Chippenham, Wiltshire	April 11, 1861.

(a) This College is the only one which does not send lists of New Members to the Medical Journals.—Hence frequent mistakes, for which the Journals are not responsible.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise on Thursday, May 23rd:—

Bright, James Albert
Harle, Samuel, Cheltenham
Hollister, George William, Newent, Gloucestershire
Holt, George C., Biddulph, Staffordshire
Langdon, John, Yeovil, Somersetshire
Mackley, Herbert, Wilsden, Yorkshire
Matthews, Charles Samuel
Morgans, John, Crosshill, Nebo, Aberystwith
Nicholson, Edward, Brighton.
Powell, William
Rutter, Joseph, Hillingdon, Middlesex
Sealy, George John, Marazion, Cornwall
Smith, Thomas Starkey, Warrington.

The following gentlemen also on the same day passed their First Examination:—

Lamb, Joseph, Birkenhead, Cheshire
Nicholson, Robert Hicks Beauclair, George-street, Hull.

APPOINTMENTS.

HUXLEY.—Mr. James N. Huxley, of Bromsgrove, M.R.C.S. and L.S.A., has been elected Resident House-Surgeon Apothecary to the Devon and Exeter Hospital.

MONRO.—Dr. Munro has been appointed Surgeon to the Dundee Royal Infirmary, for the Lochee District (a new one).

SMILES.—Dr. W. Smiles, has been elected Surgeon to the Middlesex House of Correction and House of Detention, Clerkenwell, vacant by the death of Mr. Wakefield, M.R.C.S.

STEVEN.—Mr. Steven has succeeded Dr. Begg, who has resigned, as Surgeon to the Dundee Royal Infirmary.

WHITEHEAD.—Thomas Byron Whitehead, M.R.C.S. Eng., has been elected Hon. Assistant-Surgeon to the Kent County Ophthalmic Hospital, Maidstone.

DEATHS.

BARTON.—May 20, Thomas Barton, of Thornton, near Poulton-le-Fylde, Lancashire, L.S.A., aged 57.

BROWNLOW.—May 22, Nathanial Brownlow, of Banbridge, County Down, M.D., and C.M. Glasg.

CLEWLEY.—May 25, Thomas Malabar Clewley, of Whitwick, Ashby-de-la-Zouch, Leicestershire, M.R.C.S. Eng., L.S.A.

GOODLAD.—May 24, at Huntington, near York, Joseph Goodlad, formerly of Bury, aged 67.

HUGHES.—May 21, Richard Hughes, of Kingsdown Parade, Bristol, formerly of Stafford, F.R.C.S. Eng. (Hon.) M.R.C.S., L.S.A, aged 65.

M'GREGOR.—May 26, at 22, Charles-street, Edinburgh, James M'Gregor, Student of Medicine.

STEWART.—May 18, William Stewart, of Governor's-place, Carrickfergus Antrim, C.M. Glasg., aged 63.

SUTHERLAND.—May 24, Alexander Robert Sutherland, of Silver-hill, Torquay, Devon, M.D. Edin., F.R.C.P. Lond., F.R.S., aged 79.

TAGLIABO.—Recently at Rome, Dr. Tagliabo, late President of the Medico-Chirurgical College.

THOMSON.—May 23, at Dover, Henry Urmston Thomson, M.D., aged 76.

LEES.—May 26, Thomas Lees, of Beachfield, Birkdale-park, Southport Lancashire, formerly of Manchester, Fell. and M.R.C.S. Eng., L.S.A. Lond., aged 52.

DR. ABRAHAM, of New Broad-street, has been elected a Governor of Dulwich College for the parish of St. Botolph, Bishopsgate, without opposition, in the place of Robert Parnall, Esq.

ON May 3 one of the most renowned Private Lunatic Asylums in Germany, under the superintendence of Dr. Güntz, and situated on the Thorberg, near Leipzig, celebrated its twenty-fifth anniversary. All the Doctors of Leipzig, the members of the Medical Faculty, and the chief civic authorities of the town united in congratulating Dr. Güntz on the success of his admirably-conducted asylum. This gentleman is well known for his valuable contributions to Psychological Medicine, and by the very benevolent and kind exertions he has made in every direction for the comfort and amusement of those under his care.

BRITISH MEDICAL ASSOCIATION.—The Council of the Metropolitan Counties Branch of the British Medical Association have resolved to request the co-operation both of the Members of the Branch and of those Members of the Association who, though resident in and around London, have not yet joined the Branch, in the nomination of a President-Elect for the General Meeting of the Association to be held in London in 1862; and a meeting is to be held for that purpose, at four p.m. on Tuesday, June 4, at the Rooms of the Royal Medical Benevolent College, 37, Soho-square. Of five gentlemen who were suggested as eligible, on account of their professional eminence, for the Presidency, Dr. Burrows and Dr. Conolly have allowed their names to be submitted to the approaching meeting, which will select one for the approval of the General Meeting of the Association at Canterbury.

FROM a return recently made by the War Office, on the motion of Lord Burghley, it appears that the following sums were paid to Militia Surgeons and Civil Practitioners for the Medical examination of recruits for the Household Brigade and Line, including the recruits for the Indian army, for the years 1857-58, 1858-9, and 1859-60. Militia Surgeons, 1857-58, £2036 3s. 6d.; 1858-59, £1984 8s. 6d.; 1859-60, £1280 7s. 6d. Civil Practitioners, 1857-58, £3084 6s.; 1858-59, £3054 6s. 6d.; 1859-60, £2119 16s. 6d. Total, 1857-58, £5120 9s. 6d.; 1858-59, £5038 15s.; 1859-60, £3400 4s.

DEGLUTITION AS A SIGN OF LIFE IN INFANTS WHO HAVE NOT RESPIRED.—Dr. Houzé d'Aulnot, consulted concerning a case in which an infant was found dead in a privy, and whose lungs sank on the application of the hydrostatic test, a portion of fæcal matter being found in the stomach, instituted various experiments in elucidation of the subject, in order to prove whether the child was living or not when it was dropped into the privy. From these, it results, in his opinion, that the presence of any foreign body, whether solid or fluid, in the digestive tube of a new-born infant, is a proof that deglutition has taken place; and deglutition being a vital process, life existed at the time of its occurrence.—*Moniteur des Sciences Méd*, 1860, No. cxiv.

VITAL STATISTICS OF LONDON.

Week ending Saturday, May 25, 1861.

BIRTHS.

Births of Boys, 892; Girls, 934; Total, 1826.
Average of 10 corresponding weeks, 1851-60, 1640·0.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	626	611	1237
Average of the ten years 1851-60	544·1	507 7	1051·8
Average corrected to increased population..	..	..	1157
Deaths of people above 90	2	2	3
Deaths in 15 General Hospitals	32	28	60

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DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1851.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	376,427	1	8	9	3	15	3	2
North ..	490,396	..	1	5	3	28	3	1
Central ..	393,256	..	5	2	3	9	5	3
East	485,522	2	3	4	1	20	7	6
South ..	616,635	..	2	11	3	25	13	4
Total.. ..	2,362,236	3	19	31	13	97	32	16

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	30·009 in.
Mean temperature	57·5
Highest point of thermometer	80·2
Lowest point of thermometer	36
Mean dew-point temperature	48·1
General direction of wind	Variable.
Whole amount of rain in the week	0·50 in.

Medical Times and Gazette.

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NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Aquarius.—We know of no treatise on Hot and Cold Shower Baths.

Dr. Deamer.—"Carpenter on the Microscope."

Dr. Aveling's case of Hydrencephaloccle shall appear next week if possible.

Iatricia.—We do not think much good could be done by printing the lines on the "Parish Doctor" in these columns.

A Country Surgeon should apply to Dr. Williams, of Worcester; we have never heard of any such restriction.

Mr. Hunter's letter on Sir B. Brodie and the Marshall Hall Method shall appear in an early number.

M. M. M.—Inquiry shall be made of one of our German correspondents.

Dr. Munro.—The papers have been sent.

Mr. Bulley's interesting cases shall appear as soon as possible.

Mr. S.—We never insert notices of births or marriages; and the only deaths we insert are those of members of our Profession. We believe our readers look for scientific and practical information in these columns, not for such news as may be seen in every newspaper.

Dr. Willoughby.—The water of Wildungen contains especially carbonic acid and bicarbonate of soda. We scarcely think that it can be procured here, but the Selters water, which may be had everywhere, has nearly the same composition and answers just as well as a diuretic.

A Young Practitioner could recover in the first and second cases. In the third there might be a doubt if the objection were raised as to non-registration at the time of the attendance. If it were explained to the County Court Judge that medicines were included in the charge for attendance, any reasonable sum would be recovered.

Erratum.—The three cases of Ovariotomy reported in our last number should have been numbered 22, 23, and 24. They were erroneously numbered 21, 22, and 24. That alluded to in the first paragraph of the paper was the 21st, not the 20th.

Poison Bottles.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Having been recently called to a lady who nearly lost her life through swallowing by mistake a lotion composed of a strong solution of extract of opium, it has occurred to me that, by a very simple and inexpensive contrivance, and one within the reach of every Dispenser of medicines in the Kingdom, poisonous lotions, embrocations, etc., may be made easily distinguishable from mixtures, draughts, etc.

The objections to bottles made of a peculiar shape and of glass of a different colour to that in ordinary use are the increased expense, as well as the inconvenience to many persons, on account of the room occupied, of keeping two different sorts of bottles.

Now, at every paper-hanger's, what is called a border-paper may be obtained for a mere trifle, and if one of about an inch and a-half in width and composed of two or more conspicuous colours (the more conspicuous the better) is chosen, it will, when cut of the proper length, be found applicable to ordinary bottles of any size, and will give them such an unusual appearance that, without the most unpardonable carelessness, a mistake would be almost impossible.

I forward specimens prepared according to my directions.

I am, &c. W. F. Cleveland.

23, Beaufoy-terrace, Maida-vale, May 23.

[The bottles sent by Mr. Cleveland are certainly very conspicuous objects and we consider his suggestion to be very practical and useful.—Ed.]

COMMUNICATIONS have been received from:—

Professor Simpson; Dr. Alderson; Dr. Ransome; Dr. Harley; Dr. Robert Lee; Dr. McWilliam; Dr. Graily Hewitt; Dr. Tuely; Dr. Ogilvie, Alexandria; Dr. Munro; Mr. Bulley, Reading; Mr. C. Hunter; Dr. Coghlan; Dr. Anderson; Mr. Soelberg Wells; Dr Willoughby; Mr. Hall; Mr. Derby; Dr. Pearson; Mr. Stephenson; Mr. Hutton; Mr. Walls; Dr. Ursher; Dr. Smyth; Mr. Verrios; Mr. Constable; Dr. Aveling; Dr. Druitt; Dr. McLaren; Dr. Grey; Dr. Deamer; Mr. P. LeNeve Foster; and Mr. William Cooke.

APPOINTMENTS FOR THE WEEK.

June 1. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

Royal Institution, 3 p.m. Max Müller, Esq., "On the Science of Language."

3. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

Epidemiological Society, 8 p.m. Dr. Archibald Smith "On the Spotted Hæmorrhagic Yellow Fever of the Peruvian Andes in 1854, 1855, 1856, etc." Dr. David Livingstone, "Note on the Treatment of Fever in the Zambesi."

4. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

Ethnological Society, 8 p.m. George Busk, Esq., "On a Systematic Mode of Craniometry." R. H. Major, F.S.A., "On Australian Traditions."

5. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

Obstetrical Society of London, 8 p.m. Dr. Graily Hewitt "On Unusual Elongation of the Fœtal Head as a cause of difficulty in the application of the ordinary obstetric forceps; with description of a modified form of instrument for such cases." Mr. Nunn "Observations on Acute Inflammation and Abscess of the Breast."

6. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.

7. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

Samaritan Free Hospital Lectures, 4 p.m. Mr. Spencer Wells "On Stone in the Female Bladder."

EXPECTED OPERATIONS.

King's College Hospital.—The following Operations will be performed this day (Saturday) at 2 o'clock:—

By Mr. Fergusson—Removal of Dead Bone from Femur; Removal of Tumour from Upper Lip; Removal of Malignant Tumour from Calf.

By Mr. Lee—Fistula in Ano; Varicocele; Varicose Veins; Removal of Warts.

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ORIGINAL LECTURES.

CLINICAL LECTURE
ON THE
TREATMENT OF SOME COMMON FORMS OF PNEUMONIA.

By THOMAS LAYCOCK, M.D., &c.
Professor of Clinical Medicine in the University of Edinburgh.

At our last meeting I drew your attention to cases under treatment illustrative of the uses and abuses of mercury. I now propose to offer you some remarks on cases illustrative of the treatment of forms of pneumonia of common occurrence, and which have been treated variously by blood-letting, wine, tartar-emetic, etc. In my last Lecture I impressed upon you the advantage of taking the side of the patient rather than of controversy, and by thus avoiding all theories and polemical questions, limit our attention more especially to the results of experience.

The term Pneumonia, like the terms Dyspepsia, Phthisis, Nephria, and the like, is representative of a group of diseases, and is used to express generically certain diseased states of the parenchyma of the lung, and more particularly of the air-cells. There is sometimes much difficulty in diagnosing, both physically and functionally, between exquisite forms of capillary bronchitis and inflammatory disease of the air-cells. For as the structures which become the seat of these affections run anatomically into each other, and are intimately connected and blended together, so do the affections themselves often present no strikingly-marked line of distinction; and we have broncho-pneumonia. There is, however, a real and radical distinction in the tissues affected; for pneumonia proper is a disease of the sero-fibrous tissue of the lung, and bronchitis of the mucous.

There are various forms of pneumonia, which are capable of clinical differentiation:—

I. *So-called Idiopathic Pneumonia.*—This form commonly arises from exposure to cold or wet, when there is no preceding disease of the lung, or of the individual. It is an inflammatory affection of the sero-fibrous tissue of the air-cells, most commonly at the base of the lung; and not only involves that which is contained in and proper to the lung itself, but frequently extends to the sero-fibrous investment

GENERAL SUMMARY OF SEVEN CASES OF PRIMARY PNEUMONIA TREATED FROM FEBRUARY 1 TO APRIL 10, 1861.

No.	Name.	Age.	Seat of Disease.	Previous Condition.	Complication.	Treatment.	Result.
1	Michael McM. ..	47	Lower half of left lung.	Previous health excellent	None.	Venesection only.	Relieved on the seventh day; completely cured on the eleventh day.
2	David McL.	42	Whole of right lung.	Previous attack of pneumonia.	....	Venesection, tartar emetic, and opium tonic.	Relief on the seventh, ninth, eleventh, and fourteenth days; physical signs normal on the twenty-first day; dismissed cured on the thirtieth day.
3	Duncan M'N. ..	18	Whole of right lung.	Chronic bronchitis, subject to contact of irritating foreign matter.	....	Diet; wine.	Completely cured on the seventeenth day.
4	Robert C.	27	Lower half of left.	....	Bilious complication.	Purgatives; strychnia.	Cure of pneumonia on the sixteenth day.
5	James P. (mason) ..	62	Lower two-thirds of left.	Presence of mechanical particles (stone dust); extensive bronchitis.	Purulent meningitis; pericarditis; mitral vegetations.	Expectorants; antispasmodics; cupping; turpentine; venesection.	Much relief of pulmonary symptoms; died on the twenty-third day of purulent meningitis.
6	Agnes N.	40	Right base.	Healthy.	None.	Wine; diet.	Quite cured on the twenty-seventh day.
7	Robert P.	13	Left base.	Healthy.	None.	Small doses of tartar emetic.	Dismissed on the seventeenth day quite well.

of the lung, *i.e.*, to the pulmonary or costal pleura, constituting a pleuro-pneumonia. There may be, and doubtless are, pure cases of pneumonia; but these are not common in idiopathic forms; and hence in these a pleurisy more or less extensive is found to complicate the parenchymatous inflammation. It usually attacks one lung only.

II. *Consecutive Pneumonias.*—These are manifested in the course of various fevers, as rubeola, influenza, typhus, and typhoid fever. The inflammation is more purely a pneumonia, and is not uncommonly double, that is, both lungs are affected.

III. *Intermittent Pneumonias.*—These are seen to occur in the course of other diseases, either of the lungs, or other viscera, and are very various in their symptoms and course. Such, for example, are the pneumonias occurring in the course of cardiac diseases, structural diseases of the kidney, liver, and spleen, in cancerous affections, etc. Of this class a not unfrequent and very important form of pneumonia supervenes upon a previous tubercular condition of the lung, materially modifying its character and treatment.

IV. There are forms of pneumonia, the special character of which depend primarily on some limited, or secondarily on some general affection of the nervous system. We have this predisposing cause experimentally proved and exemplified in what occurs after section of the pneumogastric nerves. The lung, in most cases, becomes consequently congested, and presents the appearance of red hepatisation. When there is withdrawal of the innervation of the blood-vessels of the lung, in consequence of some central nervous disease, superadded to the inflammatory affection, as bronchitis, one of the most fatal forms of pneumonia met with is manifested. This corresponds, I think, to the old peripneumonia notha.

V. I could mention other forms of pneumonia, but the most important is that sub-acute variety, which is usually called acute tuberculosis. Here the exuded plasma is more gradually poured out, and of a less organisable character passing into tubercle, a term which means, etymologically, nothing more than a small tuberous mass, which has acquired its form from the shape of the air-cells and terminal bronchi in which it is moulded. Acute tuberculosis is a species of pneumonia, exhibiting pyrexial symptoms, as rapid, hard pulse, brown tongue, etc.

The characters and symptoms of pneumonia will vary according to age, sex, diathesis, previous disease, etc. There are, for example, some cases occurring in the aged very apt to be overlooked, in which there is no pain, cough, or feeling of difficulty of breathing,—the best means of diagnosis here being a physical exploration.

A typical case of pneumonia is accompanied with great pain usually under the nipple. Breathing is often in a more rapid ratio than the pulse, of a hurried and panting character. Its maximum rapidity may be 80 respirations per minute. The sputum presents various appearances. Sometimes blood is diffused uniformly through it, constituting rusty sputum. Sometimes it exhibits streaks of bright red blood and occasionally it resembles prune juice in colour and consistence. The cheeks are usually flushed, of an intensely red, sometimes livid, tint, and the expression is anxious.

We have had during the present trimestre several of these varieties of pneumonia, pleuro-pneumonia, and broncho-pneu-

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monia treated by blood-letting, tartar emetic, dry cupping, wine and diet, while some have been left entirely to Nature, a mode of treatment more difficult to learn and practise than the others. The result has been, on the whole, successful and satisfactory, in so far that we have not lost a patient suffering from pneumonia simply.

The first case to which I shall call your attention is a typical example of pleuro-pneumonia; it is that of Michael McM., aged 47, labourer, native of Ireland, resident in Edinburgh, admitted March 1, 1861.

History.—The patient, who is a strong, muscular man, of well-marked arthritic diathesis, states that, until last Friday, February 22, he enjoyed excellent health. While employed on that day in wheeling a barrow, he suddenly felt a sensation of something giving way in his left chest anteriorly. This was soon followed by pain, difficulty of breathing, nausea, and loss of appetite. On Saturday morning, February 23, he had an accession of rigor, which continued without intermission till Sunday evening. It then ceased, and was followed by feverishness and heat of skin. Feeling himself getting gradually worse, he applied for and obtained admission into Hospital.

Symptoms on Admission.—Patient has a severe cough, worse during night; expectoration viscid; dyspnœa considerable; respiration forty-four per minute, shallow, and gasping; complains of severe pain under the left nipple.

Physical Examination.—Movements of chest restrained; percussion over the right lung anteriorly is resonant; over the lower half of left lung there is comparative dulness; percussion resonant over the upper half of the same lung. On auscultation over the right lung anteriorly there is harsh respiration; expiration slightly prolonged, accompanied with sibilus. Over the upper half of left lung there is puerile respiration, fine crepitation, and friction with expiration over lower half. Posteriorly, over the right lung, the physical signs are the same as in front. Over the lower half of left lung there is marked dulness on percussion, with abundant fine crepitation on auscultation. Breathing tubular about two inches below spine of scapula; local resonance considerably increased over lower half of left lung. Pulse 120, full and hard; appetite greatly impaired; bowels constipated. Ordered venesection ad ʒviij. and a poultice to seat of pain. Immediately after the withdrawal of blood, patient expressed himself as much relieved. Dyspnœa was greatly relieved, and pain much diminished. Pulse became diminished in frequency and softer in character. From this time the patient rapidly convalesced, and was discharged on March 7 quite well.

An important circumstance in its bearing on the treatment of this case is the man's previous excellent health. This supposes the absence of tuberculosis, emphysema, or any other prior morbid lesion liable to complicate pneumonia. The previous state of health is always a cardinal point to be ascertained in the history of a case. I saw at once that this was similar to many cases which I have seen in my younger days, and which were treated promptly by abstraction of blood, and that not very sparingly, until pulse and breathing were considerably modified for the better. Blood was accordingly drawn to the amount of eight ounces, with the effect of immediate relief, even while the blood was flowing. No other treatment was adopted, and he left the Hospital on the eleventh day quite well.

I shall now read you the report by Mr. Murray of the case of David McL., aged 42, bricklayer. Native of Liverpool, resident in Edinburgh. Admitted March 11, 1861.

History.—Patient states that until six years ago he enjoyed excellent health. He then had an attack of what appears to have been pneumonia, which confined him to the house for six weeks. He made a complete recovery, and continued uniformly well till Thursday, March 7, when he had a rigor which lasted a considerable time. This was followed by severe cough, pain in the right side of the chest felt both in front and behind, excessive dyspnœa, loss of appetite, and heat of skin. His symptoms underwent no improvement until his admission on Monday, March 11, the fifth day of his disease.

Symptoms on Admission.—Cough very severe; more so during night. Expectoration copious, of a rusty colour. Dyspnœa very severe. Physical signs:—Anteriorly, on percussion, there is dulness over the whole of the right lung, and an expression of pain is elicited on pressure over the lower half. Left lung resonant. On auscultation over right lung, there is superiorly harsh respiration with increase of vocal resonance; inferiorly tubular breathing, with ægophony over a circumscribed area above and external to the nipple, and bronchophony at the base; breath sounds normal over left lung. Posteriorly there is dulness on percussion all over the right lung; resonance clear on left side. On auscultation on right side respiration is harsh superiorly; there is loud sibilation in the outer scapular region, and loud snoring and coarse crepitation over lower half. Has severe pain on right side. Does not sleep at night; pulse 120, hard; no cardiac murmur; bowels much constipated; tongue coated; appetite defective; chlorides are greatly diminished in the urine—contains no bile or albumen. Patient was bled after visit to ʒvj. with the effect of relieving the pain, and rendering the pulse softer. Ordered. ℞. Sol. mur. morph. ɱxv. Mist camph. ʒj. M. Fiat haustus, to be taken at bed-time. March 12 (sixth day).—Slept very badly last night. Had great difficulty in breathing, but no pain. Dulness especially marked over a band about two inches broad, extending from above and a little in front of the right nipple to the posterior fold of the axilla. Here ægophonic vocal resonance is heard. Chlorides in the urine diminished. Ordered antimonial wine ɱxx., tincture of opium ɱvij., every four hours. 13th (seventh day).—Had a better night. Pulse 110. 14th (eighth day).—Pulse 110. Soft. Cough very severe. There is distinct crepitation audible on the right side of the chest. 15th (ninth day).—Feels much easier to-day; dyspnœa not so severe; respirations twenty per minute; urine contains a dense deposit of lithates; pulse 90, weak. 16th (tenth day).—Right lung has become more resonant on percussion, especially over the upper half; tubular breathing less marked, and vocal resonance not so loud. Abundant coarse crepitus over the lower half; cough less harassing; dyspnœa less urgent; expectoration scanty, muco-purulent; pulse 90, of fair strength; appetite improving; tongue covered with a slight yellowish fur; bowels rather loose; urine loaded with lithates. Ordered eight ounces of wine. 17th (eleventh day).—Feels better; pulse 88; appetite improving; tongue covered with a brownish fur. 18th (twelfth day).—Has slept very well; pulse 96; cough easier; has an appetite for solid food to-day.

Physical Examination.—Dulness on right side anteriorly diminished; there is abundant crepitation over the same lung, and tubular breathing about an inch above the nipple, where vocal resonance is loudly increased; breathing normal over the same lung posteriorly. 20th (fourteenth day).—Dulness clearing up; cough less severe; dyspnœa much relieved; there is still abundant coarse crepitation at the base anteriorly. 21st (fifteenth day).—Patient slept well last night. Appetite much improved; crepitation still heard over a space limited by two inches above the mammæ; pulse 60; urine loaded with lithates. Ordered a mixture containing sulphate of iron and sulphate of quina. 27th (twenty-first day).—Appetite much improved; still very weak; physical signs normal. The patient went on gradually regaining strength and appetite, and was dismissed on April 5.

This was a case for careful consideration. The patient had a previous acute affection of the lung which he called bronchitis, but which, from the history and symptoms, I judge to have been pneumonia. This suggests the practical remark that, generally, the nosology of patients by no means coincides with the technical nosology, and is to be interpreted accordingly. The old seat of lesion was now the subject of acute disease, and the symptoms were modified accordingly. His pulse was compressible, and did not decidedly indicate bleeding. I hesitated to prescribe it, but at last resolved that it should be done. The immediate result was satisfactory. His pulse became softer, and his symptoms greatly improved. Next day, however, he looked as if he were on the very verge of delirium. His pulse was rapid rapid and undulating; his skin soft and covered with a clammy sweat; his expression peculiar and nervous; his motions abrupt, and his speech rapid and not quite coherent. Delirium, I may remind you, is occasionally the result of bleeding. Be that as it may, his state was that in which a combination of tartar emetic and opium is found useful, and was therefore ordered.

The progress of this case illustrated the occurrence of critical days in pneumonia. The word critical applies strictly to a day on which the Physician may judge of the state of

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the patient and the acme of his disease. It does not mean that the state of the patient is critical, but that the Physician may be critical as to the likelihood of death or recovery. The occurrence of critical days in acute diseases has been long observed, certain symptoms arising, disappearing, or undergoing modification at regular periods. This is very well seen, for example, in variola, where the appearance and disappearance and phases of the cutaneous inflammation follow certain laws as to the time on which certain changes occur. One cannot understand why the observation of the course of disease in this respect so important to right treatment has gone out of fashion. In pneumonia it requires tact and system to note the facts. The data in which the observation consists, are the state of the pulse, urine, skin, etc., and the general feelings of the patient, which, though not always an index of his condition pathologically, still, as a general rule, constitute a fair exponent of it. You will observe that in this case there are specially marked evidences of amelioration on the seventh, ninth, eleventh, and fourteenth days. It has been long observed that certain cases of pneumonia, recover or die on these days. Hourdmann and Dechambre found that on an average of 76 fatal cases, death took place on the seventh day; of 33 cured cases, that recovery was on the fourteenth. Andral noted 112 cases, and found one-half to end on the seventh, fourteenth, and twenty-first days. A Physician in Hamburg, has recently maintained that pneumonia is so certainly a self-limited disease, that treatment is unnecessary and useless. This is pushing the doctrine to an extreme; for, though many cases do terminate on critical days, many do not. Your estimate of the results of treatment will, however, always be modified by the knowledge and remembrance of the fact. M'M., for example, was bled and relieved on the seventh day. On the tenth day, the pulse falling and getting weaker, M'L. was ordered eight ounces of wine daily.

The ordinary physical signs of pneumonia were in this case well marked,—dulness on percussion, increased vocal resonance, etc. In the early stages of pneumonia, where there is probably mere stasis of the blood, the increase of vocal resonance is due to congestion; but there is not usually consolidation sufficient to give rise to the physical sign of tubular breathing. In this case there was audible over a limited area that peculiar modification of transmitted voice called ægophony. I repeatedly drew your attention at the bed-side to the fact that, within a distance of three inches, three different voices were heard—increased vocal resonance, ægophony, and pectoriloquy, from above downwards. The occurrence of ægophony in pneumonia is not commonly noticed, and is by some ascribed to the presence of fluid in a cavity. It probably in this case resulted from consolidation more firmly established in a band of lung which was the seat of former disease, and adherent to the thorax.

The next case which I shall read is that of Duncan M'N., aged 18, baker, Edinburgh, admitted March 6, 1861, reported by Mr. Turner.

History.—Patient states that he enjoyed good health till a few weeks ago, when he began to cough and expectorate a gelatinous matter. On Tuesday, February 26, he lay down on the damp grass after running till he became very hot, and on the following morning (February 27) found that he was unable to rise on account of sickness, feelings of general uneasiness, and a sharp pain at the base of his right chest. Since then he has undergone no improvement.

Symptoms on Admission.—Physical Examination.—Anteriorly on percussion there is dulness over the whole of the right side, and a well-marked "cracked-pot" sound elicited over the middle third. Over the left lung percussion-note resonant. On auscultation, there is loud tubular breathing audible over upper two-thirds of right lung, with considerable increase of vocal resonance. Over the lower half a coarse friction murmur is audible with both inspiration and expiration. Respiration puerile on left side. Posteriorly there is dulness over the whole of the right lung, becoming more complete towards the base. Over the left percussion is normal. On auscultation, harsh bronchial breathing is heard over upper two-thirds of right lung, with increase of vocal resonance. Respiratory sounds observed at base. Friction and crepitus over lower half. Respiratory sounds exaggerated over left lung. Cough is not very severe; expectoration copious, gelatinous, and frothy. Pulse 75, soft and weak. Cardiac sounds normal. Tongue moist, covered with a slight brownish fur. Has no appetite. Bowels regular. Chlorides are diminished in the urine.

Ordered full diet and eight ounces of wine daily.

March 7 (ninth day).—Pulse 70; tongue almost clean; chlorides increasing. 9th (eleventh day). — Physical examination anteriorly shows diminished dulness inferiorly; less harsh respiration, and diminished vocal resonance. Posteriorly there is crepitation, and tubular breathing, at spine of scapula. Pulse 52; tongue moist and clean. 10th (twelfth day).—Dulness on percussion less marked, both anteriorly and posteriorly on right side; pulse 80, of fair strength. 15th (seventeenth day).—Dulness has entirely disappeared; respiratory sounds normal. Patient was dismissed cured.

This case was treated from first to last with wine. It was not a well-marked case as to rational symptoms, though diagnosed to be pneumonia by physical signs. From the appearance of the sputum, which was copious and gelatinous, I concluded that he laboured under some previous chronic disease of the lung, probably chronic bronchitis. The trade in which this man was employed—that of a baker—predisposes to pulmonary affections of a low type. Breathing a heated atmosphere, impregnated with particles of flour-dust; subjected to long hours and hard work, tuberculosis is no uncommon result. It was quite a different case from the two last, and presented less febrile phenomena, and less disturbance of the circulation.

I shall now draw your attention to a case of bilious pneumonia, also reported by Mr. Turner, treated by purgatives:—

Robert C., aged 27, a labourer, born in Ireland, and resident in Edinburgh. Admitted March 20, 1861.

History.—Patient whose previous health was good, was last week exposed to wet, and on Saturday, March 16, had a severe rigor, followed by heat, sweating, headache, pain in the loins, thirst, loss of appetite, vomiting, and severe stitching pain in the left side with difficulty of breathing, shortly succeeded by cough and expectoration. On Monday the 18th his sputum was streaked with bright red blood. He has been since then getting gradually worse.

Symptoms on Admission.—Patient has dyspnœa and pain in the left side: catching his breath. Respiration 30 per minute. Expectoration is frothy and viscid with rusty patches.

Physical Signs.—Anteriorly over right lung percussion is resonant, and comparatively dull over lower half of left. On auscultation, there is crepitation and fine sibilus with expiration over lower half of left lung, and puerile breathing superiorly. Over right lung respiration is harsh. Posteriorly on percussion there is dulness over lower half of left lung; on right side resonance. On auscultation there is abundant crepitation and sibilation with expiration over lower half of left. Over the rest of the left lung, and the whole of the right breath sounds are puerile. Pulse 96, full and compressible; cardiac sounds normal; tongue moist and creamy; no appetite; great thirst; bowels constipated; hepatic dulness slightly increased vertically; there is tenderness on pressure over the hepatic region; urine contains lithates, chlorides almost entirely absent; skin and conjunctiva have a slightly icteric tint.

Patient was ordered beef-tea and hydrargyri chloridi, gr. ij., statim; haustus sennæ ʒij., three hours after the powder. To have turpentine applied to the chest.

March 21 (sixth day).—Feels much easier to-day. Pain almost gone; breathing less difficult. Sputum frothy, transparent, and viscid, with rusty patches. Pulse 68. Bowels opened but not freely. To have yesterday's medicines repeated. 22nd (seventh day).—Pulse 72, soft and compressible; tongue slightly furred; skin moist. 24th (ninth day).—Pulse 68, complains of pain in the throat and left side of chest; ordered ℞ Strychniæ gr. ss., aquæ ʒx. M.: a table-spoonful three times daily. 25th (tenth day).—Pulse 72; tongue slightly furred; appetite improved; bowels regular; cough easier; has nervous jerkings of the limbs; ordered to omit mixture. 31st (sixteenth day).—Patient is much improved. Expectoration has almost ceased; has severe pain in the left side. Ordered a liniment containing linimentum saponis c. opio. and liniment camph., to be rubbed over left side of chest.

Patient was detained in Hospital till April 6, when he left quite recovered.

Was this a case for bleeding, or tartar emetic, or wine? My eye at once caught the icteric tint of the patient's skin

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and conjunctivæ. Knowing that there are cases of pneumonia complicated with biliary disorder, and having ascertained the alcoholic habits of the man, our inquiries were directed to the state of the liver. We found, you will remember, the vertical dulness slightly increased, and that there was tenderness on pressure over the hepatic region. These hepatic symptoms were sufficiently well marked to point to the treatment which we thought most suitable for combating the pathological condition of which they were the exponent. Besides, the patient was not very strong. His pulse was soft and compressible. It was that kind of pulse which indicates that the patient will not bear bleeding, which rather indicates nourishment and support, and is withal characteristic of a pneumonia with bilious complication. We resolved, in the first instance, to give purgatives only. The case terminated favourably under this treatment alone; his pneumonia is completely cured, and he suffers merely from superficial neuralgic pains. You will observe that later in the progress of the case I prescribed small doses of strychnia. There is a class of cases of pulmonary disease, of pneumonia, bronchitis, and tuberculosis, in which the implication of the nervous system is indicated by spasmodic cough. This class of cases is very beneficially treated by the group of remedies called nervine tonics, and you have had frequent opportunities of observing the good results of their administration. Other drugs of this class might be prescribed with equal advantage; but strychnia is the most accessible and convenient.

We have had various other forms of pneumonia under treatment, but more especially those of the intercurrent or consecutive class. In all the latter cases the treatment was necessarily expectant, and addressed rather to the alleviation of pressing symptoms than to the cure of the disease. I shall not enter into an explanation of the differences which these cases present, that would involve us simply in theories, and in a complex group of diseases like that designated "pneumonia," theory really helps but little at the bedside. What you have to do, there, is to gain experience in the treatment of disease, and that is best gained by observing a case carefully as to its origin, or causes, symptoms, course, and the effects of remedies, so that when on a future occasion you meet with a similar case, you may be able to prescribe what was found useful, and avoid what was found hurtful. And I trust that these examples will serve to impress upon you the great practical principle that the terms by which we designate groups of symptoms or of diseases correspond only to ideas, and that in practice you have the individual man to treat, and not an ideal generalisation of phenomena, however accurate it may be.

ORIGINAL COMMUNICATIONS.

CASE OF HYDRENCEPHALOCELE.

By J. H. AVELING, M.D.

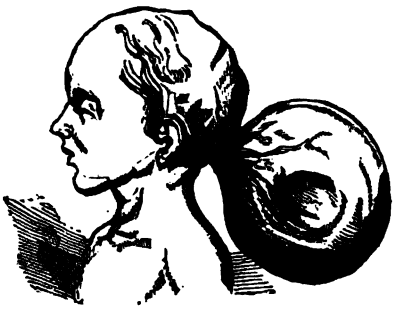
Fellow of the Obstetrical Society of London, and Honorary Member of the Obstetrical Societies of Edinburgh and Dublin.

Out of 16,654 births which occurred in the Dublin Lying-in Institution during the Mastership of Dr. Collins, only one case of hydrencephalocele was seen. But although instances of this disease are, comparatively speaking, rare, a great number of cases have been recorded since the time of Forestus, who, Morgagni says, was the first to write upon the subject. A well-reported case may be found in the "Sepulchretum" under "Hydrocephalus cum vesica carnosa circæ suturam saggitalem." (Lib. I. Sect. xvi. Obs. iii.) Ruysh also describes these watery tumours, and gives a drawing of one hanging from the side of a child's head of enormous size (Obs. lii.). The first case, however, which I have met with in the English language is to be found in the work on Surgery by Richard Wiseman, Serjeant-Surgeon to King Charles II. (Fourth Edition, p. 133), who says that he "Was fetched to a child ten days old, born with two watery tumours of the shape of cupping glasses of the middle size, seated upon the sutures lamboides and sagittalis. They had their origin within the skull. I felt the holes they thrust out at; each hole was round, I suppose of the compass of an half-crown, and, as I afterwards found, had cysts of the dura mater. The infant seemed to be dying when I came; it died that night. The next day I opened it, and found as I have said. There was also a great quantity of water floating within the meninges and in the ventricles of the brain," etc.

After the example of Wiseman, whom Denman calls "the first English Surgeon," I give the following case, leaving to abler hands the task of collecting and classifying the numerous cases which have already been published:—

Mrs. D., the mother of three children, two of which suffered from curvature of the spine, was delivered on February 10, after an interval of only ten months since her last confinement, of a female infant. At the termination of the labour, which was natural and easy, a large pouch half-filled with fluid was found hanging from the back of the child's head. The mother was unable to suckle her infant, but it took milk and water greedily from a bottle or spoon,—to no purpose, however, for it daily became worse and more emaciated, until at length on May 1 it died, uttering continuously short cries, but not convulsed.

Twelve hours after death I saw the child, and took a rough cast of the head and tumour in plaster of Paris, from which the accompanying engraving is taken.



The body and limbs were wasted to the greatest extent compatible with life. The head measured fourteen inches in circumference, and its bones were firm and closely joined to one another. The scalp was tightly drawn back from the forehead, which appeared unnaturally large and bald. From the region of the occipital protuberance a large tumour hung by a short pedicle, four and three-quarters of an inch in circumference. The tumour was soft and fluctuating, and near its pedicle covered with hair. The other part of the tumour was of a brownish tint, and at a point furthest from its attachment to the head was a cicatrix of an irregular shape, about two inches long. A similar scar in a like position was noticed in a case given by Cruveilhier in his "Anatomie Pathologique" (Monstruosités, livre xix. Pl. v. et vi.) which he describes as "une sorte de cicatrice assez analogue à celle qui succéderait à une brûlure superficielle." The cicatrix in both cases was most probably caused by the rupture of the sac before birth, for in my case the pouch was found of a large size, but only half filled with fluid when the child was born. This intra-uterine rupture of the sac was a fortunate occurrence for my patient, for had the tumour remained its original size, some difficulty would have been experienced in delivery. Mr. Chalmer in the *Lancet* (1827-8, Vol. ii. p. 698.) relates a case in which labour was delayed two hours after the head was born, by a tumour as large as a child's head containing a quart of water; and in which the feet were delivered before the supposed second head. Mrs. D. could give no date for the rupture of the sac, and could not remember having had any fall or accident to cause it. Longitudinally the tumour measured fifteen inches in circumference; transversly, fourteen inches. On opening the sac at the pedicle about twenty ounces of a thin, straw-coloured fluid escaped. Extending the incision a small, tough, fleshy tumour was found, on the removal of which an aperture was discovered, immediately above the occipital protuberance, smooth, round, and sufficiently large to admit the tip of the little finger. The dura mater formed the internal lining of the sac. The seat of hydrencephalocele, or hydromeningocele (Wallmann) is usually in the median line, but there is no part of the skull at which the hernia may not take place. It is sometimes associated with spina bifida, and like that disease it is generally incurable. Punctures and pressure seems to be the favourite mode of treatment.

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In an obstetric point of view hydrencephalocele is a disease of great interest, for on its proper diagnosis may depend the life of the mother; yet it is one which is seldom alluded to by writers on midwifery as a cause of obstructed labour. It is not easy when the contractions of the uterus are violent, to tell what a tumour in the vagina is, and whether its contents are solid or fluid. One of these tumours presenting in the vagina might be mistaken for—1. A distended condition of the bladder; 2, A collection of fæces in the rectum; 3, A uterine polypus; 4, An ovarian tumour; 5, Or the unruptured membranes. The catheter would clear up question 1; an enema or a scoop 2; an exploring trocar would prove the solidity of 3, and also decide the character of 4, 5, and of the hydrencephalocele; but it must be remembered that it would be as fatal a mistake to plunge a trocar into a fœtal brain, expecting to diagnose one of these tumours, as it would be to apply forceps and drag down a hydrencephalocele, hoping to deliver a head.

Sheffield.

CASE OF

FATAL INTUSSUSCEPTION IN AN INFANT FIVE MONTHS OLD.

By HENRY COOPER ROSE, M.D.

A fine, healthy-looking infant, aged five months, was brought to me on May 19, with the following history:—

The previous evening she had gone to bed apparently well. About midnight she cried, seemed uncomfortable, and vomited several times, refusing to take the breast. The bowels up to this time had acted as usual. On the following morning she vomited every time the mother gave her anything, even milk-and-water a tea-spoonful at a time. The mother next observed that the napkin was stained with blood every time she changed it; but there did not appear to be any straining effort, and no fæcal matter had passed.

The vomiting being the most distressing symptom, I ordered hydr. chlor. gr. j. to be put upon the tongue, and 5 drops of brandy to be administered in a little cold water every hour. This had the effect of completely arresting the vomiting; and small quantities of beef-tea were taken at intervals and retained. She would not, however, touch the breast, and lay in a listless state. A dose of castor-oil was given, but although retained, it had no effect.

May 21.—The child remained much in the same condition. Did not give evidence of suffering pain, but looked pale, thin, and sunken. The eyes vacant and rolling. There had been no fæcal evacuation. The castor-oil was repeated, together with a little calomel. The bleeding from the bowel continued, but there was no straining. The amount of blood lost was small. Neither the medicine or enemata had the effect of inducing the bowels to act.

22nd.—The blood-stains had ceased to appear in the napkins. Vomiting had recommenced, and the infant was evidently sinking. She died at noon of the following day.

Post Mortem Appearances Thirty Hours after Death.—All the small bowels were filled with flatus, very little fæcal matter anywhere. Just at the juncture of the transverse and descending colon, there was a hard mass about four inches long. This proved to be an invagination of that bowel to the extent named. The invaginated portion was highly congested, and firmly fixed by constriction of the upper part of the colon. There was slight congestion of the rest of the large intestine, and the cæcum was full of fluid fæcal matter. There were no adhesions.

Remarks.—I believe this to be a rare case. Dr. West says (a) that although the symptoms of intussusception do occur and suddenly disappear, and are frequently found after death in infants as the apparent result of the act of dying, "it has never happened to me to meet with a case of fatal intussusception, and the cases recorded in Medical journals are not numerous." The absence in this case of the evidence of pain, crying, etc., is worthy of remark; and the portion of the bowel invaginated is also, I believe, very unusual; in fact I have never read of a similar case.

Hampstead.

(a) *Vide* Lectures on Diseases of Infancy and Childhood. Third Edition.

ON

PARASITIC AFFECTIONS OF THE SKIN.

By T. McCALL ANDERSON, M.D.

Fellow of the Faculty of Physicians and Surgeons of Glasgow, &c.

(Continued from page 574.)

The prurigo met with in scabies, on the other hand, is seen principally on the lower part of the abdomen, upper and inner parts of the thighs, and front of the forearms; while in the ordinary *constitutional* prurigo, if I may be allowed the expression, the legs are most affected, the thighs less so, the back shows nearly as much evidence of disease as the front of the body, the chest more than the abdomen; and, curious enough, the skin at the flexures of the joints is rarely attacked.

Of course in these remarks I allude merely to the diagnosis of prurigo induced by lice, and not to the occurrence of these insects as a *complication* of other cutaneous eruptions, as so often occurs.

The *Prognosis* of simple prurigo pedicularis is not serious, as the disease is easily removed. Cases where it has been found difficult or impossible to destroy the lice are only met with, in my opinion, where the patient is not in good health, and generally he is the victim of some secreting cutaneous eruption, which has attracted the lice to his skin.

FIG. 13.

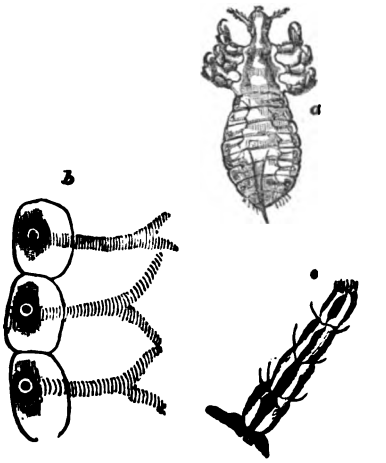

FIG. 13.—*a*, Pediculus capitis (male); *b*, Trachea and Stigmata; *c*, Antenna.

The head louse (see Fig. 13) (Pediculus capitis—Kopflaus) resembles the pediculus corporis very much. It is, however, considerably smaller; its legs are larger in proportion to the size of the body, and the abdomen is more distinctly divided into seven segments, which are separated from one another at the margin by deep notches. This pediculus is entirely confined to the scalp, and *never* attacks the other hairy parts of the body. Enormous quantities of them are often met with, and they propagate with astonishing rapidity. Owing to the irritation and itching produced by their crawling upon and drawing nutriment from the epidermis, they cause the patient to scratch the head. Thereby an eczema is often produced, especially in the case of those predisposed to this eruption; crusts form, and the fluid, which exudes abundantly, glues the hairs together, while these, in their turn, are studded with nits (eggs), which adhere to them with great tenacity. The head has then a most loathsome appearance. In the above I take for granted that the eczema is called forth by the irritation of the insects; but often the reverse is the case, the pediculi being attracted by an already existing eczema, as they seem to enjoy themselves most, and to flourish best on such a soil. The patient will generally be able to tell whether the eruption or the insects appeared first. In mild cases no secreting eruption is produced by the insects, and almost the only thing complained of is the itching.

The crab-louse (pediculus Pubis—Phthirius pubis—Morpion—Filzlaus) resembles in many respects the head and

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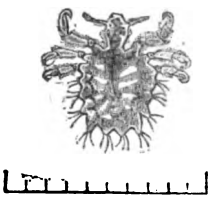
body lice, but its body is much broader, being somewhat shield-shaped, and there is no distinct separation between

Fig. 14.



100th parts of an inch.

Fig. 14.—Pediculus pubis.

the thorax and abdomen. It is marked by small spines, and besides possessing six feet which resemble those of the other pediculi, there are eight rudimentary-looking ones which terminate in bundles of hairs. This insect is met with in all the hairy parts of the body except the head, but more especially on the hair of the pubis and the parts in its neighbourhood which are provided with hair; hence the name which it has received. It does not run about like the head-louse, but grasps the roots of the hairs with its fore-legs, from which it is sometimes difficult to extricate it, so firmly does it adhere. The nits (eggs) are attached to the hairs in the same way as on the head. In withdrawing nourishment from their victims, these insects cause considerable irritation, and the scratching which results may give rise to papular pruriginous or eczematous eruptions; but the seat of these eruptions should always lead us to suspect and seek for the pediculi on the hairs close to the skin, or for the nits, which are not difficult to find, and which will clear up the diagnosis at once.

The *Treatment* of Phthiriasis is abundantly simple. Many are the medicines and varied the forms which are used for this purpose. The preparations of sulphur, mercury, staphisagria, sabadilla, pyrethrum, the essential oils and alcohol, are principally employed.

Sulphur is used in the form of vapour-baths or fumigations, or the simple sulphur ointment of the Pharmacopœia may be employed.

Mercury may be applied in the form of simple mercurial ointment, or fumigations with cinnabar, or a lotion of the bichloride in the proportion of two or three grains to an ounce of water, the solution being facilitated by a few drops of alcohol.

Staphisagria in powder is a very good preparation, or an ointment made by mixing an ounce of staphisagria with four ounces of lard and a few drops of an essential oil, as the oil of rosemary, to improve the odour. Or an infusion of staphisagria may be made with vinegar.

Sabadilla is employed either in powder or ointment, the latter consisting of a drachm of sabadilla to an ounce of lard, and scented as above.

Pyrethrum is generally applied in powder. Any of the essential oils may be used, the oil of rosemary being generally selected.

In the case of lice attacking the head, the hair should be cut short, if it is long and entangled—especially if the scalp is the seat of secreting eruptions, as we are thus enabled to remove many of the nits adhering to the hair, and to get more readily at the pediculi. A lotion of the bichloride of mercury, or the powder or ointment of staphisagria, or simple lard or oil should be applied, which causes the death of the insect. It is then necessary to remove the nits, which may be done by applying repeatedly either alcohol or dilute acetic acid, as Hebra recommends. These, after the use of the spirit, cease to adhere to the hair and may then be removed by combing. The head should also be repeatedly washed in warm water with soap. The eruptions of the scalp left after the removal of the insects must be treated according to their nature.

There is just one remark which remains to be made with regard to the treatment of pediculi capitis,—one which has been very prominently brought forward by Devergie,—and it is this,—that, in those cases where the head has *long* been attacked by *great numbers* of pediculi, especially in the case of children, it is dangerous to eradicate them suddenly, for by so doing internal diseases have been developed; and Devergie has seen two infants who died from this sudden cutting short of the accustomed itching and secretion. It is, therefore, necessary, in such instances, to cure the disease more slowly, to attack only small portions of the head at a time, and especially to avoid cutting short the whole of the hair at once. It is only in very rare instances, however, that such precautions are required.

The pediculus corporis is best attacked by sulphur vapour-baths, or mercurial fumigations, or the powder of staphisagria or pyrethrum. If one of these powders is used, warm-baths should be superadded. The clothes should be purified by exposing them to a temperature of 150° Fahrenheit, or as the common people do sometimes, and which Küchenmeister has seen successful, by burying them in hay for several weeks. Washing clothes may be put into boiling water, or cloth clothes exposed to the steam rising from a boiler. The pruriginous eruption which the lice have occasioned will disappear after they have been killed; but any constitutional eruption, such as eczema, which may have been called forth by the irritation of the scratching, or which existed previous to the occurrence of the lice, must be treated on general principles. When an eczema exists, it may sometimes be necessary to treat it first of all (on the same principle as an ordinary eczema) before attacking the pediculi; for they are very apt to lie hidden among the crusts, and soon multiply again, giving as much annoyance as before. This remark is applicable to all the forms of Phthiriasis.

The pediculus pubis is easily killed by rubbing into the *roots* of the hair a lotion of bichloride of mercury, which is invariably effectual, provided it be brought into *direct contact* with *all* of them. The application should be made, not only to the hair of the pubis, but also to the hair about the scrotum, perinæum, and anus, and should be repeated daily for a week. But if any excoriation exists, care must be taken not to use the lotion too freely, else salivation may be induced. In cases where there are many excoriations or abrasions, it is safer to use an ointment of sulphur or staphisagria, or an infusion of the latter, or the oil of rosemary. Mercurial ointment is the preparation most in vogue for this complaint, but it is a dirty application, and I never employ it.

There are very many other remedies which have been successfully used, but it is quite unnecessary to allude to them further, for those already mentioned are amply sufficient, when properly used, to kill the pediculi, no matter how numerous they may be.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

CONDUCTED BY
JONATHAN HUTCHINSON,
Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital,
AND BY
J. HUGHLINGS JACKSON, M.D.

STATISTICAL REPORT OF OPERATIONS PERFORMED DURING THE YEAR 1860.

The subjoined Report comprises the cases supplied by the following Provincial Hospitals:—

The Derby, Leeds, Leicester, Sussex County, Addenbrooke's (Cambridge), Nottingham, Chester, Cheltenham, West Norfolk and Lynn, Sheffield, Hull, York, Northampton, Cumberland, and Gloucester.

CASES OF TRACHEOTOMY.

Case 1.—The Sussex County Hospital.—*Œdema of the Glottis—Tracheotomy—Death—Autopsy.*—The patient, a boy, aged 15, had been a patient here, suffering with "strumous corneitis." This was considerably relieved by the treatment adopted. He went to bed the previous night quite comfortable, and awoke in the morning, complaining of difficulty of breathing, etc. Mustard plasters and hot fomentations were applied with seeming relief, but he was again suddenly taken

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with a paroxysm of dyspnœa, "fighting for breath," and the House-Surgeon being sent for, got to him in time to see him turn blue in the face, and fall back suffocated. Tracheotomy was immediately performed by Mr. Rogers (House-Surgeon), and artificial respiration kept up, but without avail. At the autopsy the whole interior of the larynx was found much inflamed and swollen, the epiglottis especially being swollen to an enormous size.

Case 2.—Addenbrooke's Hospital, Cambridge: Dr. Humphry. —*Tracheotomy on account of Pressure of Diseased Glands in an Infant—Death.*—A pale, thin, very sickly infant, aged four months, was brought to the Hospital on November 14, 1860, on account of enlargement of the glands near and beneath the left angle of the jaw. Dr. Humphry prescribed for the child; but on the 18th there was great difficulty of breathing, evidently from pressure upon the larynx. There was no disease of the lungs. Dr. Humphry offered tracheotomy, as affording a possible though by no means good chance. The parents, under the existing circumstances, desired that the trial should be made. Chloroform was given, and Dr. Humphry performed the operation. She breathed comfortably through the tube, and was thought to be rather better for the operation; but after four hours suddenly died.

Case 3.—Addenbrooke's Hospital, Cambridge: Dr. Humphry. —*Tracheotomy on account of Enlarged Cervical Glands Pressing on Windpipe—Death—Cancer at Base of Skull.*—S. G., a not unhealthy-looking woman, aged 37, was admitted on April 4, 1860, on account of enlargement of cervical glands, on both sides of the upper part of the neck, beneath the sterno-mastoid, extending from the head, half way down the neck—very firm, painful, interfering with the movements of the head, and with swallowing and breathing. The affection began about October, 1859. A variety of measures were tried, but the swelling slowly incressed. The movements of the head became very limited and painful, and she could only swallow fluids. Her words were scarcely intelligible, and her breathing was often difficult, and she had occasionally severe attacks of dyspnœa. These, at last, became so sudden and severe that suffocation was apprehended. Dr. Humphry performed tracheotomy on May 27, 1860. For a time it was hoped there was some improvement in her condition, and some diminution of the swellings in the neck; but there was never any lessening of the difficulty and pain attendant on moving the head. The breathing continued easy through the tube, but she now began to be troubled with a cough, which increased, and was attended with profuse expectoration of mucus. No disease could be discovered in the lungs. Thinking that the tube might be a source of irritation, it was removed one day, but she was nearly choked, and implored to have it replaced. She gradually became thinner and weaker, although able to take her food. She died on July 1, 1860. On post-mortem examination the glands were found of stony hardness, and growing from the anterior surface of the two upper cervical vertebræ, and from both the cranial and under surfaces of the basilar portion of the skull, was a mass of encephaloma, rather firm and white.

Case 4.—The Leicester Infirmary: Mr. Paget.—*Laryngitis in a Case of Phthisis—Tracheotomy—Death—Autopsy.*—A man, aged 34. Laryngo-tracheotomy, on January 19, for chronic laryngitis of two years' duration. There were signs of solidification of both lungs, but no ronchus audible in any part. The tube was kept in. He had no bad symptoms until January 25, when he was suddenly seized, at 2·45 a.m., with symptoms of sinking. His face became pale, breathing hurried, and râles were heard on the back and front of the chest. Stimulants were freely given, but the man died at 7 a.m. At the *autopsy* the apices of both lungs were seen to be stuffed with tubercle, and there was a large cavity containing a frothy liquid at the apex of the left lung. Tubercle was scattered more or less throughout both lungs. The larynx was found to be extensively ulcerated.

Case 5.—The Cheltenham General Infirmary: Mr. Eves.—*Tracheotomy for Tumour Pressing on the Larynx—Under Treatment.*—In this case Mr. Eves performed tracheotomy on September 5, for urgent dyspnœa arising from pressure by a tumour (supposed to be a polypus, growing from the base of the skull) on the larynx. The operation has been satisfactory as regards the breathing; but at this date (May 27), the tumour having gradually increased, is beginning to interfere with deglutition. The case will be fully reported by Mr. Hartley (House-Surgeon) when the ultimate result is known.

CASES OF TREPHINING.

Case 1.—The Hull Infirmary: Dr. King.—A man, aged 38, admitted May 5, at 9 a.m., having been knocked down by a railway engine, the wheels passing over his legs and feet. He had sustained the following serious injuries: compound fracture of the skull (starred) on the right side, with a considerable amount of depression, and two other scalp wounds on the left side; also compound fracture of the right tibia and fibula about the middle; compound dislocation of the left foot outwards, the whole of the inner malleolus projecting through the wound. The toes of both feet were lacerated. There was much collapse, hæmorrhage from both ears, contusion of right eye and dilatation of both pupils, but they were slightly sensible to stimulus. He was insensible, but sensitive. At 12 o'clock, the symptoms continuing, the wound over the depressed fracture was enlarged and a portion of bone removed with the trephine, which allowed of the depressed piece being easily raised to its proper level. A good deal of blood escaped from between the skull and dura mater. The symptoms were not relieved by the operation, and the hæmorrhage from the ears continued, especially from the right. The urine was withdrawn with the catheter. The next evening (May 6) there was a slight remission of the symptoms; the pupils were less dilated, and he was more easily roused. But this improved state soon passed off; he became more and more comatose, and died on the 7th at 7·30 a.m., forty-seven hours after admission. *Autopsy, Eight Hours after Death.*—There was found an extensive fracture of the right parietal bone, spreading in various directions, and ultimately extending down towards the base; one or two portions of bone were isolated, but not detached. There was a thin layer of effused blood upon the dura mater beneath the fracture: this membrane was not injured at the part where the trephine was applied, but there was a small rent in it lower down, and the brain beneath that spot was superficially lacerated. There was no further effusion of blood either beneath the dura mater or in the substance of the brain. The fracture on the right side was found to descend and pass in front of the petrous bone, parallel with its anterior surface, through the body of the sphenoid bone and across the middle fossa of the left side, but it did not extend up towards the vault of the skull. Thus the base was fractured completely across.

Case 2.—The Hull Infirmary: Mr. Craven.—A man, aged 55, admitted on October 17, at 7 a.m., having been injured in the hold of a vessel by a large crane falling upon him. There was a curved incised wound, three inches long, on the left side of the frontal bone. This latter was fractured, and a portion was driven in to some depth. The man was perfectly sensible, and walked upstairs with the assistance of two others. Pupils dilated. Pulse 85. At 12.30 the wound in the integuments was enlarged, a portion of bone removed with Hey's saw, and the depressed piece raised. It was nearly triangular in shape, about an inch across, and being quite loose was removed. Several other small loose pieces were also taken away. A portion of the internal table, which projected beyond the outer one, and detached therefrom, was not removed, as it was firmly adherent to the dura-mater, and did not exercise any pressure on the brain. There was a minute aperture in the dura-mater at the upper part of the opening in the skull. After the operation the pulse became fuller and more frequent, and the man expressed himself as feeling relieved. Water dressing applied. In the evening the pupils were still dilated. Pulse 98, feeble. 18th.—Passed a restless night. Skin hot. He was still sensible, though less so. Pulse 100; pupils dilated, but sensible to stimulus. He passes his urine naturally, but his stools involuntarily. ℞ Potassæ nitratis, ʒj., vini ant. tart. ʒij., mist. salinæ, ʒviij. M. Capiat ʒj. 3tiis horis. 19th.—Respiration inclined to be stertorous. Pulse 128, full and hard. One grain of calomel was given with each dose of the above mixture. In the evening the pulse still continued full and hard. He was then bled to twelve ounces. The pulse became softer after the bleeding, but there was no remission of the symptoms. The respiration became gradually more and more stertorous, and he died the next day, October 20, at 11 p.m., having lived three days and sixteen hours from the time of the accident. The autopsy was made thirty-eight hours after

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death. The fracture of the skull was confined to the part struck; there was no starring nor extension of it in any direction. The dura mater was so firmly adherent to the cranium that the brain itself rather gave way in the removal; these adhesions were, doubtless, of old standing. The anterior lobe of the brain on the left side was coated with a thin layer of pus. The substance of the brain at the seat of injury was softened and disorganised, partly hollowed out, the abnormal appearance gradually shading off to a greenish livid colour. This change of structure occupied nearly the whole of the left anterior lobe. Ventricles empty, and no marked congestion of brain, nor any other morbid appearance found. There was an opening in the dura mater at the seat of injury, nearly half an inch long, but this was not visible during life.

Case 3.—The Sheffield General Infirmary: Mr. Barber.—A boy, aged 4, admitted on January 7, 1859. While going down some steps with a pitcher in his hand, he fell, breaking the pitcher, and driving some portions into the left frontal eminence. Both tables were fractured and depressed. He was trephined ten hours after admission. No bad symptom followed. He left the Hospital April 2, the wound having quite healed up. Pulsation was visible over the cicatrix.

Case 4.—The Sheffield General Infirmary: Mr. Jackson.—A woman, aged 50, admitted September 6, with compound fracture and depression of the left parietal and occipital bones, in the situation of the left lambdoidal suture, and two wounds more anteriorly in the line of the superior longitudinal sinus, baring the pericranium. She had been struck several times by her husband with a hand hammer of 8lbs. weight. Mr. Jackson removed several portions of bone with Hey's saw, from the site of fracture. Subacute inflammation of brain came on, and a large collection of matter formed beneath the scalp behind the right ear. An opening was made and a quantity of pus evacuated, bare bone being felt on the introduction of a probe. She sank and died on September 22. *Post-mortem Eighteen Hours After Death.*—The membranes of the brain were found dull and congested, and beneath the site of fracture there was some ulceration of the dura mater, and behind the right ear, between the dura mater and the bone, was a collection of pus and softened coagulum of blood, there was separation of the lambdoidal suture on the right side, which allowed the matter to well through it, and form the collection in the site where the opening was made. The brain itself presented evidences of inflammation, and was soft in consistence; and the bases of the middle lobes were completely softened and disintegrated by clots of coagulated blood. There was a fracture at the base extending from the right lambdoidal suture into the foramen magnum, and also two starred fractures of the internal table of the left parietal.

Case 5.— Northampton General Infirmary: Mr. Mash.—John J., aged 13, was admitted at 7 p.m., October 14, 1859, under the care of Mr. Mash. He had been found three or four hours previously, lying bleeding and insensible, having (as was supposed) been kicked by one of a team of horses which he had been driving alone. He had vomited (it was said) a good deal of blood on his way to the Hospital, a distance of eight miles, and gave no indication of consciousness till toward the end of the journey, when he complained of pain and of the jolting of the cart. On admission he was quite unconscious, but screamed loudly when disturbed. There was a transverse wound of the forehead, three or four inches in length, through which could be distinctly felt a fracture running across the frontal bone, a long narrow horizontal piece of which was evidently quite detached and depressed, being overlapped both above and below by the rest of the bone. The lower of the overlapping portions of bone was also somewhat depressed. The face was pale, skin cool, pupils natural and active, pulse 60; there had been epistaxis from both nostrils, but there was no paralysis, no hæmorrhage from the ears, and no subconjunctival ecchymosis. He screamed and struggled when the wound was interfered with, but could not be roused into consciousness so as to answer questions or recognise his parents. In an hour's time, there being no change in the symptoms, he was taken to the operating-room; a vertical incision was made in an upward direction at right angles to the horizontal wound, and the flaps reflected a little; and a line (about a quarter of an inch in width) of the upper overhanging portion of bone was then removed with a Hey's saw. By the lever, inserted under the edge of the depressed fragment, this was then tilted up and removed by forceps, but was found to consist of merely the outer table of the skull-cap, the inner table presenting a broad, rough surface, the edges of which extended everywhere beyond the reach of the finger, except at one spot, where its edge could be pretty distinctly defined. It was now resolved to remove the edge of the lower overlapping portion of bone; and the pericranium being scraped from it with the finger-nail for the purpose of exposing it to the saw, a fissure was discovered in it running parallel to the line of fracture, and allowing it to be readily removed by applying a little force with the elevator. This instrument was then passed below the upper edge of the depressed inner table, which could now be felt lying quite loose, and by carefully seizing it with forceps, it was removed in several fragments. Its size was about two square inches. The dura mater was then exposed, clean, bright, and pulsating, and every fragment of bone being apparently thoroughly removed, and the wound looking very clean, the flaps were replaced, and their edges united by suture. 15th.—He had slept all night, and could be roused into answering a question or two peevishly. The right eye was ecchymosed; pupils natural. He took a large black dose, and in the evening the bowels acted thoroughly without the patient being conscious thereof, and he could not answer questions, though he was freely sensitive to pain; the scalp was hot, the feet and body generally cool; pulse 80, irregularly intermittent; pupils and respiration natural; no convulsion; no paralysis. 16th.—No consciousness, except of pain; pulse 80, more regular; urine and fæces passed involuntarily; pupils dilated and inactive; the skin had become hot, the brain was pulsating vigorously, there was free purulent discharge from the wound, and the bowels acted freely. 17th.—He had regained his consciousness, though he was still very drowsy. He told his own name, and, in answer to questions, complained of the right eye hurting him. Pupils active; pulse 60. During the next few days he slept a great deal. He became gradually more and more intelligent when roused. He next regained perfect consciousness, and quickly recovered without another bad symptom.

AMPUTATION OF THE PENIS FOR EPITHELIAL CANCER.

Case 1.—The Leeds General Infirmary: Mr. Teale.—A man, aged 37. Epithelial cancer involving the whole penis. Amputation. Recovered from the operation, but the disease returned in the stump and glands. *Case* 2.—The Leeds General Infirmary: Mr. Teale.—A man, aged 46. Epithelial cancer of glans penis. Amputation. Recovery.

ST. THOMAS'S HOSPITAL.

ABDOMINAL TUMOUR OF DOUBTFUL NATURE.

(Under the care of Mr. SOLLY.)

[Reported by Mr. WATSON.]

Mary Ann C., aged 32, a married woman, the mother of four children, was admitted July 3, 1860. In March of the same year she was a patient under the care of Mr. Solly, having been kicked in the abdomen. She left the Hospital much improved. About three weeks or a month before her re-admission she noticed a swelling arising on the left side, over the region of the stomach. About a fortnight before she came in this seemed to have discharged itself into the stomach, as she vomited up a quantity of dark brown matter mixed with pus. The swelling was now greatly diminished in comparison with the size it was before the supposed evacuation of the tumour, and there was very little pain.

July 3 (the date of her re-admission).—The swelling had gradually returned, and was now seen as a broad, somewhat prominent, swelling on the left side, extending over the lower ribs. She complained of shooting pain and occasional shivering. Her appetite was bad. The urine natural. Pulse rather quickened. The pain was increased by deep inspirations. She slept well. One of the Physicians who saw her believed that the swelling was an abscess in the abdominal wall. Another that it was an abscess in the abdominal cavity, and that at the time of the bursting of the former abscess possibly a little blood had been discharged into the stomach by a very slight and partial rupture of the tissue of some viscera, as the spleen or liver.

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6th.—Her bowels were moved, but nothing particular was noticed.

8th.—The swelling was rather more prominent. It did not give her much pain. She seemed better on the whole.

12th.—She complained occasionally of want of appetite and sickness after eating, but these symptoms were very variable, being better one day and worse another.

14th.—The swelling has suddenly disappeared. She could not eat her breakfast, and had been sick, but nothing peculiar was noticed in the vomitted matters or in the fæces.

20th.—She had gradually improved. The sickness had gradually gone off. She then seemed pretty well. Discharged.

GUY'S HOSPITAL.

CASE OF RHEUMATIC PERICARDITIS, ENDOCARDITIS, AND PLEURISY.

(Under the care of Dr. GULL.)

[Reported by FREDERICK P. WEAVER, M.B.]

George H., aged 10, admitted into the Clinical Ward of Guy's Hospital on March 6, 1861, under the care of Dr. Gull.

There was no evidence of hereditary predisposition, and he had had good health until last October, when he was attacked with rheumatism. About Christmas he had a second attack, which continued for some weeks. Five days before admission he became delirious and forgetful, and on the evening of the same day his abdomen and feet were observed to be swelled. The day before admission the scrotum became œdematous, and he could only lie on his right side. He passed a very restless night, sitting up in bed, and screamed with pain in the left side when taken up from bed.

On admission, he had a pale face, somewhat puffy. He was emaciated, and there was an œdematous condition of the abdomen and scrotum, with only slight œdema of the legs. He had a distressed and anxious expression of countenance. He sat up in bed, breathing hurriedly, forty respirations per minute, and complained of pain in the middle of the back and at the lower part of both sides of the chest. He had a hot and dry skin and a frequent, short, dry cough. On examination of the chest, percussion revealed an increased area of pericardial dulness and some dulness at the bases of both lungs, posteriorly. A pleuritic rub was heard near the right nipple, and here the vesicular murmur was replaced by bronchial breathing. A pleuritic rub was also plainly heard over the region of the heart. Moist râles were heard at the base of the right lung, posteriorly, and dry and moist râles at the base of the left. A pericardial *frottement* was heard below the left nipple, and towards the axilla a diastolic murmur (aortic) is also heard. (Dr. Gull compared the rhythm of the pericardial sound to that produced by the movement of a fœtus in its liquor amnii.) Pulse 108, hard, sharp, jerking; tongue rather furred; appetite tolerably good; thirst; abdomen rather tympanitic, walls œdematous; liver normal; urine, specific gravity, 1030, depositing lithates, containing neither sugar nor albumen. Ordered two grains of Dover's powder every six hours; brandy, an ounce and a-half daily; a dessert spoonful occasionally; arrowroot; beef-tea.

March 7.—Had passed a very restless night, with little sleep. His bowels had been moved five times in the night. He complained of pain near the right nipple. Distinct "new leather" creak was heard at this spot. Pleuritic rub heard over heart, and pericardial friction.

8th.—Respiration more rapid; pulse 114; troublesome cough. He had been purged frequently. Had been delirious in the night, when dozing. Urine scanty. Pleuritic rub not heard at right nipple to-day, but plainly heard over the region of the heart. Diastolic murmur heard, but no pericardial rub. Ordered a starch enema; to continue the Dover's powder, and to take two ounces of brandy daily.

9th.—More tranquil; purging ceased since yesterday morning, the enema not having been administered.

11th.—Respirations 54; pulse 104; troublesome cough; sweating skin; great distension of scrotum; pain in right side when he coughed; Dover's powder and brandy continued.

13th.—Much improvement; breathing easy; pulse 100; no pericardial or pleuritic rub.

15th.—Less distress in breathing.

19th.—Evidence of pleuritic effusion in the left side of the chest, this side measuring three-quarters of an inch more than the right side; dulness at the left base, posteriorly, reaching as high as the angle of the scapula; the dulness changed place with the altered position of the patient; tubular breathing; deficient tactile vibration and ægophony. The impulse of the heart was felt below the fifth rib; diastolic murmur at the third intercostal cartilage; same murmur preceded by a short systolic murmur heard at fifth space below nipple and in axilla. Cardiac dulness forms an oblique oval, whose long diameter is four inches, and short one two inches and three-quarters. Impulse of heart visible, somewhat heavy; pulse 112, of fair strength, but of a "regurgitant" character; no pericardial friction sounds; œdema of scrotum quite subsided.

25th.—Lies on his left side; frequent cough; no expectoration; much dyspnœa; sweats a good deal; flushed cheeks; pulse 140; respirations 48. The fluid in the left pleural cavity is diminished, the dulness reaching not so high up by an inch. Ordered ℞ Æth. chloric, ɱv.; pulv. Doveri, gr. jss. Mist. Mucilag. ʒss. 6tis horis. General treatment continued.

28th.—No pain, but when he lies on left side or coughs, then felt in left infra-mammary region. Pleuritic effusion gone; no dulness posteriorly at the base of the left lung; respiratory sounds heard quite down to the left base; rhonchus and large crepitations heard on both sides of the chest; pulse 120.

30th.—Frequent cough; slight expectoration; bronchial râles and large crepitations universal on both sides of the chest. Systolic and diastolic murmur towards the apex of the heart. Diastolic murmur over aortic valves; large heaving impulse. No pericardial friction sounds.

April 28.—Discharged; pericarditis and pleurisy cured, valvular imperfection remaining.

KING'S COLLEGE HOSPITAL.

EXCISION OF THE KNEE-JOINT—RECOVERY WITH A FALSE JOINT AND USEFUL LIMB.

On Saturday, May 18, a young woman was brought into the operating theatre, whose knee-joint Mr. Fergusson had excised five years ago. For this operation she was admitted January 16, 1856. The disease had begun about two years before, by an injury. She was for a time able to get about on it, but for several months before admission she had been in bed. The excision was performed on March 1, 1856. The patella was not removed, as it was only superficially affected; it was scraped and then replaced. The disease was found to be very extensive, especially of the tibia; and after removing two slices from that bone, Mr. Fergusson removed also a quantity of dead bone by the scoop. The recovery was for a time rather sluggish, but ultimately she got quite well, and was able to attend to her household duties, suffering no inconvenience whatever; she could easily stand on the leg, and could run upstairs or jump off a chair as if she had had no disease and no operation. Up to within five months her health had been quite good. The great feature of interest in this case was, that there was considerable mobility of the joint, which remained to the present time, and which Mr. Fergusson demonstrated to those present. It was the first case Mr. Fergusson had seen in which this had happened. It put an end to "the factious opposition of persons who knew nothing on the subject, and yet declared that no good result could be obtained unless anchylosis occurred, and that this was so rare, that the operation must therefore be considered unadvisable." Since seeing the good result of this case, he (Mr. Fergusson) had been indifferent as to whether the result was osseous or fibrous union.

Mr. Fergusson added that he was now about to operate for disease in the locality of the new joint, but quite unconnected with it. All the parts connected with the first operation were quite sound. She was of a highly strumous habit, and was therefore liable to fresh outbreaks of disease, etc. There was strumous suppuration in the cellular tissue about the upper part of the leg; but after freely exposing the parts, only one small piece of diseased bone, the size of a fourpenny-piece, could be found. From the sinuses a quantity of tenacious strumous matter was removed. Mr. Fergusson believed it was very desirable to remove this, as it acted as a sort of plug, preventing healing. A small piece of bone was picked away from the front surface of the tibia.

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THE LONDON HOSPITAL.

(Maternity Department.)

TWINS—SUSPENDED ANIMATION—SUCCESS OF DR. SILVESTER'S METHOD OF ARTIFICIAL RESPIRATION USED FOR HALF-AN-HOUR.

[Communicated by Mr. Woodman.]

Elizabeth M. was taken in labour after a dose of purgative medicine, at 3.30 p.m. on May 10, 1861. She sent for me at 9 p.m.; I arrived there at 9.30, and found the membranes protruding from the vagina, with a fœtal head in the usual position. I ruptured the membranes, and a girl (living) was almost immediately born. The child was rather small, but perfectly formed, and with a tolerable quantity of hair on its head. Placing my hand on the abdomen, I found another child in utero, which, on examination, I found presenting its feet, with the toes backwards. I ruptured the membranes immediately, and in less than five minutes the second child (a male) was born. It was much smaller than the other, and the testes had not descended. The funis was twice round its neck, but there had been no delay with the head as the child was so small and the pelvis large. However, the quantity of liquor amnii was very small, and the cord may have been compressed in utero; at all events, when born it made no attempt at respiration, nor could I detect any pulsation in the cord, or in the child's heart. On dividing the cord only a drop or two of blood escaped. I then tied, and commenced alternate inflation and compression of the chest, dipped its body into a warm bath for a minute, sprinkled cold water on its face and chest, etc., but these measures had done no good at the end of ten minutes. I therefore commenced raising the arms simultaneously over the head, as far back as possible, about sixteen or eighteen times a minute. This I continued more than ten minutes without success, but then the child gave a gasp; in five minutes more it cried; and in half-an-hour after commencing Dr. Silvester's method natural respiration was fully established. The child ultimately did well, and even seemed stronger than the larger child. Both placentæ and membranes were firmly adherent to each other, but quite distinct.

CASE OF VARIOLA WITH VACCINIA IN AN INFANT.

[Communicated by Mr. Woodman.]

Mary Ann E., aged 24, residing at Stepney, gave birth to a living female infant, at full term, on June 30, 1860. In the same house one grown-up person and one child were suffering from small-pox, and another child, who had been dead a week from the same cause, lay in an adjoining room. There was nothing special in the labour, and the mother appeared very well till the third day, when she complained of pains of a shifting and apparently slight kind, now in the knees, now in the shoulders, and then in the side. She had been vaccinated in childhood, and the marks were plainly visible on both arms. She thought the pains rheumatic, saying she was subject to them; still, under the circumstances, I thought it best to give a guarded opinion. On the fourth day she was slightly feverish, and on the fifth had one or two spots on the face, two or three on one arm, and one on the upper part of the right breast, two inches from the nipple. After the eruption she had no fever, nor any unfavourable symptom. I advised that she should not touch the child herself, should suckle it chiefly from the left breast and wear a shield over the other. I proposed to vaccinate the child, which was not allowed till the tenth day of its age. Meanwhile in the woman who nursed it the eruption of small-pox had broken out thickly, and the child was left to its mother. The nurse referred to had never been vaccinated, but the child's father, who had also had small-pox, had it but very lightly; he never kept his bed at all. The child's vaccination did not take, and I therefore repeated it on the thirteenth day (three days from first vaccination). This time three fine vesicles were produced: but on the twentieth day of its age (seventh day of vaccination), the small-pox eruption appeared, perfectly distinct, and the pustules very numerous and large. Both diseases ran their full course, and the marks of both are visible. The child is, I believe, now in good health.

Medical Times and Gazette.

SATURDAY, JUNE 8.

POPULAR MEDICAL BOOKS.

The Medical Journalist is compelled from time to time to notice the various works on Medicine which are written for the public. He has to deal with them as a judge of their general merits, their honesty, and their literary ability. Then he must notice the kind of notions which their readers will derive from them, the results which would follow if they were acted upon, and, above all, the general impression which the great body of readers will receive of the education and moral tone of the Profession whose members thus come forward as public teachers, and of the inherent character of the art which they practise, and whose arcana they offer to divulge.

Such books are so numerous that we have before us several new ones, or new editions of old ones, which we may take as the subjects of our commentary; and, as they admit of a certain classification, we will begin with such as treat of the laws of health and life generally.

Of books of this first class, if well executed, we cannot have too many. Nothing is more likely to render the duties of the Medical Practitioner easy, agreeable, and effectual than the diffusion of at least the elements of physiology amongst the population. What a blessing it will be when the Physician in the out-patients' room finds it superfluous to insist on the wholesomeness of clean skins and clean clothes, and when monthly nurses shall believe cool, fresh air and cold water to be less injurious than gin and caudle. It is perfectly absurd to imagine that there is any jealousy on the part of our Profession against the widest diffusion of knowledge like this. Those persons who are best acquainted with the laws of life, and with the functions of the healthy body, will be most acute in detecting deviations from health, most eager to obtain advice about them early, and most intelligent in acting on the directions they receive. It is quite a mistake to imagine that the most profitable patients are those who neglect the "stitch in time" and let slight *malaise* run on into great illness. The anxiety and fatigue of attendance upon dangerous illnesses are seldom compensated adequately by even the most liberal fees; whilst, on the other hand, it is undeniable that the pleasantest and most lucrative occupation of the Practitioner, although it requires no little acuteness and ingenuity, consists in treating the "*petite santé*" of persons who understand something about their own health and are inclined to take care of it.

By all means, then, let some portion of physiology enter into the education of every class in society. Even the scholars in ragged-schools may be taught why we breathe, the dangers of foul air, the virtues of soap, the necessity of wholesome food, and the fact that illness, in every degree, is caused by the violation of some of those palpable laws for the government of the universe which the Creator has given his intelligent creatures the wit to discover. And, as poetry forms the universal vehicle of instruction for the ruder states of society, and laws, religion, morals, prophecies, and historical tradition have each been successfully communicated in this shape, so we feel that it is quite in accordance with the fitness of things that Physiology, the youngest of the sciences, should, in this last age, be adopted by the Muses, and infant voices chant sanitary songs, even as preceding generations have sung the "moral songs" of the excellent Dr. Watts:

"For truth can oft, in pleasing strains conveyed,
Allure the fancy, and the mind persuade;"

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as says the immortal Tasso, in Mr. Hoole's translation. The Epicurean philosophy owed more of its popularity to Lucretius, and agriculture to Virgil, than to the most solid of prose writers; Homer was a more potent teacher of morals than the stoics; and so the author of "Household Verses on Health and Happiness" may be able to effect a more widespread reformation by his poetry than has been accomplished by the philosophic argumentation even of Chadwick, Combe, and Southwood Smith.(a)

These "Household Verses" are entitled to the most unqualified commendation which we can give them. They are imbued with a tender and loving religious spirit, representing the Common Father as desirous of raising His creatures out of every degradation, moral and physical, and they connect what ought never to have been divorced, the idea of physical beauty and cleanliness with that of inward purity, truthfulness, and honour. Moreover, there does not seem a line in the book which can be objected to on the score of its being unpractical, or crotchety, or quackish; and there is nothing that needs be read twice over in order to be understood,—an essential thing for success with the poor.

"Do you wish to be healthy?
Then keep the house sweet;
As soon as you're up
Shake each blanket and sheet.

"Leave the beds to get fresh,
On the close, crowded floor,
Let the wind sweep right through,—
Open window and door.

"The bad air will rush out
As the good air comes in,
Just as goodness is stronger
And better than sin."

The virtues of air and cleanliness of course occupy the prime place in the book. Warm clothing is not left unsung:—

"Worsted stockings, flannel coats,
Round the body setting close,
Keep off sickness, cough, and cold,
Keep off many a pill and dose."

Tight-lacing is disposed of on grounds physical, æsthetical, and moral. The heart and liver must not be squeezed; and too small a waist is shown to be a deformity:—

——— "'twas pitiful to see
How women screw the waist;
'Twas disproportioned, ugly too,
Unwholesome, and misplaced."

The vulgar argument against vaccination is disposed of in a poetic dialogue between two poor mothers:—

"But, Margaret, just remember,
Your baby's head was bad
Without the cow-pox; and just think
How many a rash he's had."

"Its teething brings all that;
And, then, when babies fret
At mealtime, what improper food
The little creatures get."

Painters are taught in ballad stanzas how to escape lead colic, and tailors and sempstresses are shown the evils of constrained and stooping attitudes. Even on the subject of Temperance and Tobacco the use is distinguished from the abuse, with none of the ravings of Teetotalism; and when we read the poems on Flowers in the Sick Room, Honour, The Fountain, and Play Out of Doors, we cannot but wish that every child in the kingdom, from the Palace to the Ragged-School, may be taught these useful rhymes. A little greater variety of versification would be an improvement, as the only fault of the book is that it smacks too much of the metres of Brady and Tate.

(a) "Household Verses on Health and Happiness," by the Author of "Thoughts in Verse for the Hard-working and Suffering." London. Price 9d.

In the "Instructions to Mothers and Nurses in the Lying-in Chamber," by Dr. Lory Marsh, and the "Advice to a Wife," by Mr. Pye Henry Chavasse, we have examples of another class of books, in which some account of Physiology is combined with more or less of instruction as to what has to be done in certain emergencies, and under certain deviations from natural processes. Dr. Marsh's tract is agreeably written, and if he were to leave out his alarming cases of poor women who became "corpses," and to add a great deal more of plain, practical matter, it would be a useful manual for Mrs. Gamp. Mr. Pye Chavasse's work, so far as it confines itself to instruction in things as they are, is quite unobjectionable. The more an intelligent patient understands her own condition the better. But it is when the amateur has to act, instead of to understand,—or, in other words, it is in rules for practice that the authors of popular works find their greatest difficulties. If general in their rules, they are apt to be vague and misunderstood; if particular, they are liable to omit some of the conditions necessary for the application of remedies, which thus may be used in a wrong manner. There is besides, the vice of priggishness or Puritanism, which is almost inevitable when a writer tries to fence in his rules from deviations either to the right or left, and descends to particulars which, put on paper, appear tiresome from their minuteness. It must be confessed that Mr. Chavasse's work contains specimens of each of these kinds of infirmity. If, for instance, a child be born apparently dead, the direction is that "a few smart blows should be given on the buttocks and back, and rag should be singed under the nose, taking care that the burning tinder does not touch the child's skin. If these simple means should not quickly succeed," Dr. Marshall Hall's "Ready Method" is to be tried; or else artificial respiration from mouth to mouth; the navel string meanwhile is directed not to be tied till animation is restored (provided there be pulsation in it); and if artificial respiration should not succeed, the child is to be immersed up to his neck in a warm bath at 98° Fahrenheit. Of which directions we may say, that there is not one of them which may not be misapprehended, or dangerously misapplied, whilst the simplest exposition of the *rationale* of exciting respiration, and the directions to sprinkle cold water on the chest whilst the child is in the bath, or to rub the back, are omitted. On the subject of the diet of parturient women we are surprised to find Mr. Chavasse adhering to the old gruel and starving system, which the more fortunate women, in London at least, are delivered from. It is one vice of all books of the sort, that in the anxiety to avoid what may be mischievous, the directions are apt to be ludicrously timid and vacillating. Hot water is too hot, and cold milk too cold, and the result is a kind of impossible lukewarm milk and water system. Thus, speaking of lying-in "females," Mr. Chavasse says—

"For the first two days the diet should consist of gruel, arrow-root, tea, dry toast and butter, or bread and butter; taking care, however, not to overload the stomach with too much fluid."

As to beverage, we are told that,—

"For the first ten days toast and water (with the chill taken off) is the best beverage. Wine, spirits, and beer should not on any account be given."

"It is a mistaken notion," we are told, that whilst suckling, women "require *extra* good living."

"The best meats are mutton and beef; veal and pork may be eaten occasionally for a change. Salted meats are hard of digestion, therefore if boiled beef be eaten it should be very lightly salted. In winter it is better to have the boiled beef unsalted. Of course salt should be eaten with the *unsalted* meat."

"A mother should not suckle her infant immediately after taking exercise, but wait for half-an-hour."

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These quotations are presented as examples of the trivial and of the "righteous overmuch" style of directions into which writers of these books appear to be always falling. Imagine a poor, hard-working woman coming in to her hungry infant, and waiting half-an-hour before she suckles it! When shall we hear the last of these everlasting rules about veal and pork? Is it really necessary to tell people not to eat salt junk if they can get anything better, or that they may add a spoonful of salt to an insipid bouilli? Can a woman yield one or two pints of milk daily without taking an adequate weight of extra food? Will any poor young mother's stomach be the better for lukewarm toast and water, or the worse for a glass of cold seltzer and sherry, or mild home-brewed? And can any woman live on the abominable diet prescribed for the first two days without distending her stomach? A set of quibbling finical directions like these cannot give the public a very favourable notion of the breadth and depth of the Medical intellect; but we notice them here, not merely because they are *maculæ* in Mr. Chavasse's otherwise useful work, but because they are vices inherent in the whole class of books of which it is a sample.

We should place a patient in Mr. Chavasse's hands with the full conviction that she would not be gruelled in this shocking way, and that his practice would be less severe than his rules. He, doubtless, is afraid of giving his sanction to too stimulating a regimen; and in his anxiety to avoid one extreme, he sanctions the other; or, in order that the persons for whom he writes may steer clear of either extreme, he is forced to recommend what seems timid and over-scrupulous. Writers for the Profession trust their readers, and speak to the point. Writers for the public are afraid lest their readers should commit mistakes, and hence they are always "hedging," and falling into over-refinements which are impracticable.

But the authors we have just quoted write loyally to their own Profession. There is a third class of popular books on Medicine, which are intended to glorify the writers, not as members of, but as dissentients from, the great mass of the Profession, and as they show no mercy to their Professional brethren, so they really deserve none. Of this class, we are sorry to say, is a treatise on "Ourselves, our Food, and our Physic," by Benjamin Ridge, M.D. Such books may be known by certain infallible tokens. Whereas Medicine is an imperfect and conjectural art, slowly picking up fragments of truth here and there,—so, on the contrary, these works start with some complete system or theory which accounts for all facts in health and disease, and serves as an infallible guide to treatment. "Disease," says Dr. Ridge, "has never been properly understood. This has arisen from the want of a theory or chemico-vital standard of health." Of course Dr. Ridge has such a theory. He divides agencies into Acids and Alkalies, and believes that diseases are distinguished by excess of one or the other, and should be treated accordingly. We cannot explain what we do not understand; and when we read that "vitality consists in the constant regularity into which certain active predominant elements act upon passive ones of an opposite character, and constantly reproducing them by a regular and incessant metamorphosis,"—we only hope that others are more enlightened that ourselves. But we can comprehend the depreciation of established modes of treatment, and the most dangerous prescriptions, with which the work abounds. Take an example. Speaking of the "early periods of nursing after confinement," he says:—

"Should there be a tendency to very full breasts, it may be expedient to reduce the action of the milk glands, and so to prevent those most painful occurrences incident to maternity, namely, abscesses in the breasts. The following pills will, under such circumstances, be found of great service:—

"Take Tartarised antimony, 3 grains
" Grey powder, 3 grains
" Powdered opium, 6 grains
" Spirits of wine, enough to make a mass.

"Divide into twelve pills; one to be taken two or three times a-day."

In a chapter on "Medical and Self-Torture," Dr. Ridge says:—"So much evil is added to natural affliction by the means used to remedy it, that it often strikes me mankind seem not to be satisfied with moderate suffering." "That medicines administered with the best intention, and according to all rules of art, by the Profession itself, aggravate disease and suffering, is too clear to need any illustration."

It is positively vexatious to find an energetic and clever man, such as Dr. Ridge must be, wasting his time in constructing impossible theories, taking the greatest pains to show how his brethren err, "even with the best intention," and then publishing, for popular use, prescriptions, the severity of which causes a sympathetic twinge to the bowels of the humane reader. We may err grievously, yet we are thankful to say that it is no rule of our art to give antimony, mercury, and opium three times a-day because some plump young spouse has an exuberant secretion of milk; and if such practice be the fruits of a refined chemico-vital theory, then welcome Mrs. Gamp and her caudle.

Here we must pause. We wish to establish our classification of popular Medical writings into, 1. Books which teach principles, which we heartily recommend; 2. Books which teach practice, which are by no means easy to write, and drag their writers into error in spite of themselves; and 3. Books which glorify the author and his system at the expense of his brethren.

Mr. Baron Bramwell, one day in sentencing a thief to penal servitude for life, said,—"Take my advice, my fine fellow. Thieve quietly. Don't knock other people about, and you won't get knocked about yourself." Medical writers who appeal to the public, and abuse their brethren, may take the hint. If they are knocked about by Medical reviewers they need not complain.

THE WEEK.

A "difficulty" has occurred at the Royal Sea-Bathing Infirmary at Scarborough, which has led to the resignation of Mr. Dale, one of the Surgeons, and which gives another illustration of the evils of gratuitous Medical services. Mr. Dale refused to submit to a rule requiring the Medical officers to enter their attendances in a book, and to keep notes of the patients' cases; and he ordered extra diet, at the expense of which the Committee grumbled. On the first point, Mr. Dale was clearly wrong. The rule may have been wrong or absurd, although it is really most judicious; or it may have been vexatiously enforced, although there is no evidence that it was; still, even if it had been, Mr. Dale, by accepting the office of Surgeon, bound himself to obey it. Surgeons are not obliged to offer their services gratuitously; but Governors of Hospitals are entitled to make such regulations as they may think fit for the government of their Institutions. Mr. Dale therefore should not have accepted nor held the office, if the rules were such as offended his self-respect. On the second point, the Committee are evidently wrong. Medical Practitioners are incessantly taunted with neglecting diet, and thinking only of drugs. There are cases in which they cannot do their duty without the most lavish administration of nourishment. To restrict them thus in the use of this all-important remedy, and to throw on them the responsibility of treating the sick, whilst they deny them the requisite authority, is absurd, and may well lead to the resignation of the whole Medical staff. When the Committee gravely represented to the Medical officers that dissatisfaction had arisen amongst

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the patients, because a special diet and stimulants were ordered for some of them, they forgot that if they keep the Surgeons in strict discipline they ought to do the same by the patients. The first question has also been raised at the York County Hospital, and we are rather surprised to see that a rule to the effect that the visits of the Medical Officers be recorded in a book should be opposed by those officers. We are quite sure that every Medical Officer of every Hospital attends much more frequently than he would do if he only acted up to the strict rules of the Institution; and an attendance book becomes the best proof of the extent to which the Charity is indebted to him. The passing of such a rule cannot be considered as an offence to Medical men; and it might be a good plan for the proposition to come from the Medical staff.

The question is asked, "Who are the Parsees?" and (with especial reference to the case of Mr. Colah, whose claims to be examined in competition for the office of Military Surgeon were lately rejected by the Secretary for War) it is asked, "Are they fit associates for English gentlemen, and able to live in cold climates?" The reply is, that they differ as much from the darker and more degraded races of India, as an Englishman at the Cape differs from a Bosjesman. They belong to one of the oldest and noblest historic races of man, and there is every reason beforehand for believing, what has been proved by experience, that they are capable of flourishing in temperate or cold climates. We will leave the following passages from "Prichard's History of Man" to speak for themselves, merely noting that the Zend, the language of the ancient Medes and Persians, a sister of the Sanscrit, and the now dead language of the sacred books of the Parsees, has much nearer affinity with the *German*, than with the Latinized elements of modern European speech. It will be a strange spectacle for the world if the English refuse to acknowledge these descendants of an old and honourable branch of the Indo-European or Japetic stock:—

"The Parsees, who are believed not less than the Guebres to be genuine descendants of the ancient Persians, are also described by all those who have seen them in Surat and other districts of India, as a remarkably handsome and well-formed people. Their complexion is darker than that of the Persians, as it might be supposed, from the nature of the climate under which they have dwelt for many centuries; but their features are entirely in the European style,—this is the uniform report of those who have seen them in Bombay, and it has been confirmed by the testimony of the Parsees who have visited England, as well as by their own persons, considered as specimens of their countrymen." "The Zendavesta is a part of the Sacred Scriptures of the Magi, commonly attributed to Zoroaster, and preserved by the fire worshippers of Persia at the time when they were driven out of the country by the armies of the Caliphs. The exiles were principally priests, and persons of the higher class, who adhered to their ancient superstition, whilst the mass of the people embraced Islam. They took refuge in the eastern borders of Persia, where they were called Guebres; whilst others who went towards India and settled in Guzerat and Surat, had the name of Parsees."

The distinguished Professor of Anatomy and Physiology to the Royal College of Surgeons in Ireland was on Monday last entertained at dinner in the Examination hall of the College, by the subscribers to the medal recently struck in his honour. The chair was taken by the President of the College, Dr. Jameson; the vice chair by the Vice-President, Dr. Mackesy, of Waterford. Between sixty and seventy gentlemen sat down to dinner. The usual loyal toasts having been drunk, an address expressive of the feelings of esteem for Dr. Jacob, and of gratitude for his efforts in the cause of the Medical Profession in Ireland, entertained by the subscribers, was read, and, with a beautiful copy in gold of the medal, was presented to Dr. Jacob. To this gratifying address, in which the recipient was so correctly and deservedly described "as an accomplished Anatomist and Physiologist, an author of more than European reputation, and a teacher and lecturer of the highest order, whose name is universally known and respected, and will go down to posterity associated with that organ whose structure and diseases he has so profoundly studied, and in connexion with which his investigations have been rewarded with the signal honour of the discovery of the *membrana Jacobi*," Dr. Jacob gave a suitable reply, followed by an interesting sketch of his own career. A number of Professional toasts having been drunk, the meeting separated.

We are glad to find that the salary of the Medical Officer of Health for the City has been raised from £400 to £600 a-year, in face of the opposition of an original genius named Elliott, who argued that, with the population of the City decreasing, and with the sanitary improvements continually going on within it, under the authority of the Commission, it was fair to presume that the duties of the Medical Officer would in future be lessened. He argued, too, that sanitary laws and conditions were now so generally known and acted upon, that the office of the Medical Officer had become practically obsolete, except for purposes of superstition; and that what the Commission now wanted in the public interest was not a Medical Officer at all, but an Assistant Engineer. We regret that the increase of salary was qualified by the stipulation, "that that sum was to cover the duties which Dr. Letheby might have to discharge for the Commission as Public Analyst, under the Act for preventing the adulteration of food and drinks." No lawyer would do the work of one of these offices for £600 a-year.

In our article on "Taking a House," we advised our readers to beware of the proximity of the large sewers. We have further said that the sources from which sewer air may enter houses are so numerous that it is almost impossible to pronounce that such air may not have been concerned in creating any given illness. The newspapers bring before us this week a case which amply justifies our caution. The subjoined extract from the proceedings of the Vestry of St. George, Hanover-square, tells its own tale. Dr. W. Brewer, F.L.S., the well known Physician, and Churchwarden of the parish, said:—

"The head of a sewer has fallen in under the premises of Mr. Glentin in Little Bruton-street. It formerly was the main trunk of the King's Scholar's Pond sewer; but about thirty years ago the then Commissioners diverted the sewer at a point between Avery-row and Grosvenor-street. At a certain point the main sewer was cut off, a new main line was then built, and continued its course a considerable distance till it again united with the old trunk. The old trunk thus severed was neither taken up nor replaced by any smaller one; but received along its entire course certain local sewers, and conveyed the sewage from them to the new main trunk at its further extremity. The old trunk thus converted into a means for transmitting local sewage to the main sewer, was shown to be in a dangerous and inefficient condition; in fact, little, if anything, better than an elongated cesspool, and moreover so unsound as to be unfit for use. A dispute had arisen as to the party in whose jurisdiction this second trunk was, whether local or metropolitan. In the meantime, lives were jeopardized and the state of the atmosphere daily increased the danger of fever.

"Mr. Richman said the sewer was 480 feet long, 7 feet wide, and 7 high."

Imagine such a pestiferous ditch running *under houses*, sending out its exhalations at night through all sorts of crevices, and then falling in! and remaining open whilst a dispute is being arranged as to who is liable for the repairs!

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We are glad to find that several Medical men received their due honours at the annual meeting of the Royal Humane Society held this week. The Duke of Somerset presented the medallions of the Society to the following gentlemen, accompanied in each instance by a few suitable remarks:—To Dr. Christian, the principal Medical officer of the Society, the gold medal, for his zealous and unwearied exertions during the last fifteen years; the silver medal to Dr. W. H. Mackintosh, of the 10th Brigade Royal Artillery, for saving Gunner James Murphy, who sank while bathing in about twelve or fourteen feet of water at the bottom of the cliffs under Fort George, Guernsey, on the 9th of July, 1859; to Dr. Marcus Dill, of Ballymena, for saving a lunatic named Hammill, who attempted suicide by jumping off the rocks into the sea at Portstewart, on the 14th of September, 1860; and to Mr. Harton, Medical student, for saving a woman, who attempted suicide by jumping off a bridge, a height of thirty feet, into the river Shannon, at Banagher, on the 29th of August last. Such things must not pass without record.

A Fellow of the Royal Society calls attention to the fact that the cast iron of gun-boats, under the influence of sea-water aided by the galvanic currents set up by the contact with copper bolts, may become dissolved, leaving the carbon which exists in it in the form of a brittle plumbago, which would require no Armstrong gun to send it to the bottom.

REVIEWS.

On Scrofulous Diseases of the External Lymphatic Glands; their Nature, Variety, and Treatment: with Remarks on the Management of Scrofulous Ulcerations, Scars, and Cicatrices. By P. C. Price, M.R.C.S., Surgeon to the Great Northern Hospital, etc. 8vo. Pp. 159. London: 1861.

Mr. Price has devoted considerable attention to the study of scrofulous affections and their allied disorders, and he has enjoyed large opportunities of observing the various conditions under which these maladies present themselves. It is long since any special work on scrofula has appeared in this country, and this is one reason why that under notice will be received with favour by the Profession.

The book is divided into four chapters, in each of which one of the four particular forms into which Mr. Price has divided scrofulous diseases of the external lymphatic glands is considered. It is true that according to the strict classification the Author has placed these diseases under three heads only, viz., Inflammation, Chronic Enlargement, and Tuberculous alterations of glands, but he has very properly considered separately the acute and chronic forms of inflammation. With regard to acute inflammation of the lymphatic glands in scrofulous persons, he is of opinion that such a disease is, comparatively speaking, rare, and probably he is correct; for although cases are frequently met with where decidedly scrofulous persons are suffering with glandular abscesses presenting all the features of acute inflammatory action, still a careful enquiry into the history of such cases will inform us that the symptoms have been weeks, or even months, in arriving at their present state. Mr. Price is of opinion that if suppuration proceed in a gland there will be no chance of absorption of the pus, but that if the cellular tissue be implicated, this fluid may be removed. He is certainly borne out by experience in this matter. Some little time ago we saw a remarkable instance of a large abscess situated between the scapula and spine in a highly strumous child, gradually resolve as the strength of the patient returned.

With respect to the treatment, the Author very properly lays great stress upon the importance of first attending to the general health by the exhibition of those remedies which are already well known to the Profession, and locally he prefers a recourse to the knife rather than allowing the abscess to burst.

In the second chapter the Author considers the more important subject of chronic scrofulous inflammation of the glands. The symptoms of this disorder and the varied conditions under which it is met with are very clearly given, and he is fully aware of the serious consequences which may sometimes result from this disease attacking the glands of the neck. "The most serious consequences occasionally ensue from the great size to which the deep cervical glands attain. The inconvenience that arises solely from pressure on important parts is sometimes imminent and accompanied with the most harassing symptoms. Instances are well authenticated in which fatal results have occurred from extensive enlargement of these ganglia, owing to the pressure they have exerted on the œsophagus, trachea, nerves, and large carotid vessels."—P. 20.

Mr. Price strongly recommends the iodide of ammonium as an internal remedy in this form of disease; compared with the iodide of potassium, he says, "its rapidity of action appears greater; for experiments have shown that its effects though analogous to those of iodide of potassium are more quickly produced."—P 32.

In the third chapter the Author speaks of chronic enlargement of the external lymphatic glands, independent of inflammatory action. He says:—

"I have been induced to consider enlargements of the external lymphatic glands occurring in scrofulous subjects under two distinct forms, because I believe that a very large proportion of glandular swellings arise independently of appreciable inflammation. Such a distinction was formerly but slightly, if at all, noticed by authors who have written on the subject of glandular affections; and I am the more desirous to insist on a distinction, because I am sure a correct interpretation can be thus more easily offered as to the non-effect of certain supposed resolvents and discutients administered for the cure of this form of *so called* scrofulous swellings."—P. 39.

The distinctions between simple hypertrophy and chronic inflammation of the glands are carefully laid down by the Author, and a study of this chapter will materially assist the Practitioner in recognising this form of disease with accuracy.

In the fourth chapter "tuberculous disease of the external lymphatic glands" is considered at great length and with much care. Some very valuable data are furnished by the authors in connexion with this particular condition of the lymphatic glands. He shows that by far the larger proportion of cases of tuberculous degeneration occurs in the glands of the neck—next in the axilla and then in the groin. With reference to the co-existence of tuberculous deposit in the lungs and external lymphatic glands at the same time, Mr. Price's experience goes to prove that there is a certain antagonism between the external and internal tuberculising process and that in the adult especially these disorders do not appear in concert.

With regard to treatment, the Author lays down sound, clear, and explicit rules; and some valuable and practical remarks on the employment of iodine are worthy of perusal by any one, however experienced he may be.

In conclusion, we may state that this work will enhance the character which Mr. Price already fairly possesses of being an intelligent and zealous cultivator of surgical science. It is well and clearly written, and is full of observations and practical precepts which will be found useful to all engaged in the treatment of scrofulous disease.

The Genetic Cycle in Organic Nature; or, the Succession of Forms in the Propagation of Plants and Animals. By George Ogilvie, M.D., Regius Professor of the Institutes of Medicine in the University of Aberdeen. Small 8vo. Pp. 296. Aberdeen and London: 1861.

The object of this extremely interesting and elaborate little work is, first of all, to determine the mutual relations of those diversified forms which the researches of naturalists have shown to be propagated from each other, in many different species among the lower orders of both kingdoms of nature; and, secondly, to consider what analogy can be traced between the successive forms in these species, and the phenomena which occur in the reproduction of those higher in the scale of organisation.

Many of the questions involved in this most interesting inquiry are exceedingly obscure, and therefore the author

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does not hope to enlist the interest of any large circle of readers; nevertheless, we believe that this volume may stimulate the zeal of many earnest investigators in this branch of physiology. The work fills a great gap in the literature of biology. It places facts in a novel point of view; and when we study and compare the matter it contains, with the history of the ovum as given by Dr. Allen Thomson, and the "Origin of Species," as related by Dr. Darwin, we must regard the science of Biology as at this time going through a period of transition; and the conclusions arrived at can only claim a provisional acceptance.

The volume opens with a lucid chapter on the derivation of organic beings, and goes on to describe the reproductive process in the vegetable and in the animal kingdoms. The nature and varieties of "alternate generation" are then discussed, followed by a chapter describing the occasional interpolation of a continuous series of buds, germinations, or offshoots (*pullulation*), constituting a variable feature in the reproductive cycle. The author then goes on to discuss the question, "Whether, in the higher species of animals, in whom sexual generation is the only well-marked agency for the purpose of propagation, there are any associated phenomena corresponding to the germination of the lower classes; and whether the phenomena of alternation are represented in the higher organisms?" In this interesting chapter, and the succeeding one, illustrations are given which really go to show that certain phenomena in the development of the embryo, and especially some related to the maturation of the sexual organs, have a certain correspondence with the best marked cases of alternate generation.

A chapter on the relations of ova and germinæ, with a summary of conclusions arrived at and a statement of the homological relations of the parts concerned in reproduction, close this interesting volume. We recommend it to those interested in this subject; but we think the author by amplification and the use of more simple language might make the subject more useful as a medium of instruction for students, and those whose knowledge of Biology is not sufficient to appreciate the bearings of the intricate questions discussed without more explanations than are given in the text.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

EXCERPTA MINORA.

Treatment of Epistaxis.—Dr. Pockels observes that after no other form of hæmorrhage has he seen the same amount of anæmia and cerebral disturbance which results from excessive epistaxis. He has found the internal use of secale cornutum a most admirable remedy, with which may be also combined, if desired, tannin, bistort, or tormentilla. This treatment succeeds in even obstinate cases which resist plugging.—*Varges Zeitschrift*, vol. xiv. p. 221.

The Uterine Douche in Galactorrhœa.—After adverting to the well-known examples of the induction of uterine contraction in consequence of excitement of the mammary nerves, Dr. Abegg, of Danzig, calls attention to other cases exhibiting the influence which stimulation of the uterine nerves may exert on those of the breast. In one, in which the infant had to be removed from the breast, and in which none of the ordinary means sufficed to check the excessive secretion of milk, this continuing to inundate the woman for weeks, a tepid uterine douche was employed during a quarter of an hour. Slight bleeding from the uterus ensued, and lasted for a fortnight; and during this time the secretion of milk gradually diminished, the breast decreasing in size proportionally. Menstruation soon afterwards returned, and the woman's health, by the aid of iron was completely restored. Another case occurred to the author in the person of a primipara, who was prevented suckling her child on account of sore nipples. The secretion of milk continued in excessive quantity during ten weeks after delivery, the woman otherwise being very well. The tepid douche was applied during a week—once a-day for the four first, and three times a-day for the last three days; bleeding followed the last application. The secretion of milk gradually diminished, and regular menstruation was established.—*Monatsschrift für Geburtskünde*, vol. xvi. p. 425.

Formula for the Administration of Chloroform, Ether, Turpentine, Camphor, or Essential Oils.—M. Vée recommends the following as a valuable means for the equable administration of these medicinal substances: Chloroform (or any of the above) 4 parts (or less), oil of sweet almonds, 15 parts, powdered gum arabic, 10 parts, water, 100 parts, syrup 25 parts. The chloroform is to be dissolved in the oil, and rapidly emulsified, to prevent evaporation. *Syrup of Chloroform* may be well prepared by the following formula:—10 parts by weight of chloroform are to be dissolved in 60 of oil of sweet almonds, 40 parts of gum added, and an emulsion formed with 350 parts of water. In this cold emulsion, placed in a close vessel, 540 parts of sugar are to be dissolved. It is a very stable syrup, rendering water white on admixture with it, and it contains exactly one-hundredth of its weight of chloroform.—*L'Union Médicale*, No. 49.

An Epidemic of Jaundice in Italy.—M. Martin gives an account of an epidemic of essential jaundice which he had the opportunity of observing among the artillery and engineers of the French army stationed at Pavia during the Italian war. It commenced during the great heats of August, and terminated by the end of October. There occurred 71 cases in an effective of 1022 men. The causes he considers to have been the unusual heat, which gave rise to great congestion of the liver, the fatigue of long marches (the mounted men suffering oftener in proportion than the unmounted), indulgence in alcoholic drinks, and marsh miasmata. Great increase in the size of the liver in most of the cases, and of the spleen in many, was observed, and all complained of pain in the epigastrium and in the hypochondria. In fact, this last was the first symptom of the approaching jaundice. None of the cases proved fatal. Professor San-Galli informed the author that a similar epidemic prevailed in the town of Pavia at the same time, and that he had met with several cases of cirrhosis of the liver.—*Recueil de Mémoires de Médecine Militaire*, Vol. iii. p. 374.

Arseniate of Soda in Scrofula.—Of all the various agents employed in treating scrofula, M. Bouchut has found the arseniate of soda the most efficacious and energetic. Arsenic, in fact, is one of the best of our tonics, and it is a powerful succedaneum of iron, quinine, or cod liver oil, and for this reason it is efficacious in most organic and nervous cachexiæ when the resulting disorders have not become too considerable or too inveterate. In scrofulous cachexia is an excellent remedy, children under its influence generally recovering their strength, colour, and appetite. But this is only an amelioration, for in cases in which it effects a *cure* the cachectic state has not yet been attained, and the local manifestation is confined to the skin, mucous membranes, and the glands. Beyond these, in diseases of bone and in tuberculosis it is only a good palliative. In scrofulous coryza, ulceration of the skin, suppurative adenitis, otorrhœa, leucorrhœa, or perforations of the velum, the relief obtained is prompt. It may be given with quinine or in simple syrup, and M. Bouchut recommends doses of $\frac{1}{60}$ grain of arsenic to commence with, gradually augmenting the quantity.—*Bulletin de Therapeutique*, vol. lix. p. 433.

Subnitrate of Bismuth as an Injection in Acute Gonorrhœa.—Dr. Mouslon, a French Military Surgeon, as the result of numerous trials, confirms the good account given by M. Caby of the efficacy of this treatment. He mixes twenty parts of well washed bismuth—if not well washed the acid which remains may give rise to irritation—in 200 parts of distilled water, causing as much to be taken up as possible. Some of this is thrown into and retained for ten minutes in the urethra, a local emollient bath being first employed. In only the severest cases is the patient obliged to maintain absolute rest for four or five days, after which he is enabled to return to his ordinary habits and diet. The cure, indeed, takes place more quickly under the use of this agent than that of any other. In chronic gonorrhœa success is less marked, and astringent injections may afterwards be required; while in confirmed and obstinate gleet, occurring in a broken constitution, the bismuth is of no use. M. Mouslon appends to his communication an account of a mode of treating painful chordee which he has found very successful. It consists in desiring the patient to sleep on the belly, having first fixed the penis by means of a piece of linen in the fold of the left or right groin.—*Recueil de Mém. de Méd. Milit.*, tome iii. p. 52.

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Spermatorrhœa and Insanity.—Dr. Lisle, Medical Director of one of the French Lunatic Asylums, concludes an elaborate paper upon the "Influence of Involuntary Seminal Emissions in the Production of Insanity" in the following terms:—1. Involuntary seminal emissions exert a most pernicious influence on the nervous system, and become a frequent cause of insanity. 2. They impart a peculiar cast to the symptoms of that disease, enabling individuals who are the subjects of it to be distinguished from the other insane. 3. Insanity caused by spermatorrhœa resists all means of treatment directed only against the affection of the brain. 4. On the other hand, it becomes almost constantly and rapidly cured when these discharges are arrested, if the patients have not become the subjects of paralysis or dementia. 5. The modern theory which regards insanity as primarily and essentially a cerebral disease, is not absolutely true. Positive facts exist in Medical science proving that in a certain number of cases the brain is only secondarily and sympathetically affected in consequence of disease in another organ.—*Archives Générales*, vol. xvi. p. 430.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

PRUSSIA.

Berlin, May 18.

PROFESSOR HENOCH ON THE TREATMENT OF VOMITING.

Although vomiting is in most cases merely a symptom of diseases of the stomach, the brain, or the sexual organs, and has to be treated according to the general rules laid down for the therapeutics of these complaints, cases now and then occur in which even the closest examination of the organs named show no disease, and when the vomiting appears to be entirely independent, or, as it is generally called, idiopathic or nervous. An increased sensibility of the vagus or the glosso-pharyngeal nerve,—which latter is generally affected when there is a sensation of nausea,—may in excitable persons, in whom reflex phenomena are easily produced, especially in hysterical women, give rise to vomiting as well as to eructations, spasms of deglutition, crying, bronchial asthma, etc. Nevertheless, the diagnosis ought, in cases of this description, to be made with great caution, as latent affections of the sexual organs, from which the vomiting may originate, are easily overlooked, and even a most searching and often repeated examination may give negative results, although in the further course of the disease, or at least at the post-mortem examination, considerable structural changes may be found. Some time ago, Professor Henoch had a lady under his care who vomited almost every kind of food and drink, either immediately or a few hours after having taken it. This patient was not only examined by him, but also by Professors Langenbeck, Romberg, Virchow, and our celebrated gynæcologist, Karl Mayer, in the most minute manner, and even under chloroform; still no morbid processes were to be discovered, so that the vomiting was believed to be purely nervous, especially as the patient also suffered from hysterical fits which often took a cataleptic form. After vomiting had, without interruption, lasted for nearly seven years, the lady died; and the post-mortem examination, which was made by Professor Virchow, revealed a considerable stenosis of the ileo-cæcal opening—that is, a merely mechanical cause of the complaint. If we consider that small herniæ which are not discovered, and an inward position of the xiphoid process are not unfrequently the occult causes of an apparently unaccountable chronic vomiting, great doubts should always be entertained about the existence of a purely nervous vomiting, especially if all other signs of a so-called increased nervosity are wanting, and if the vomiting occurs in boys and adult males. Still cases will occur now and then in which nothing but the diagnosis of nervous vomiting remains possible. Professor Henoch has recently seen three cases of this kind, two of which occurred in his Clinic, and one in private practice, and in all of them creosote had a curative effect.

One of these patients was a boy, aged 16, who had been in good health, and was suddenly attacked by violent vomiting, together with asthmatic symptoms, after having taken a fatiguing walk. Every kind of food, even water, was vomited, either immediately or about half-an-hour afterwards, scarcely changed, but mixed with much tough mucus. After a short time the general health became weakened in consequence of the disturbed nutrition. The movements of deglutition appeared to be normal, but the patient said he felt as if there was a valve in his throat; an enormous hypertrophy of both tonsils and catarrh of the pharynx, however, easily accounted for this. Spontaneous pain in the stomach was altogether wanting, although there was a sensation of pressure on the anterior surface of the thorax and in the right side; but there was no change in the bulk of the liver, nor hardness in the neighbourhood of the stomach, which was only slightly sensitive to pressure. Acidity of the stomach, and eructations, and a strong acid taste of the vomited substances, was frequently complained of. The bowels were only opened once in every three or four days. A striking symptom was the acceleration of the respiration (forty in the minute), and the strong contraction of all the muscles of respiration, those on the neck and the chest as well as of the diaphragm; and expiration was very loud and sharp. These phenomena increased if the patient went upstairs or merely walked about, and asthmatic sensations were then also complained of. Percussion and auscultation of the heart and lungs did not give any abnormal signs; the voice was unchanged, and speaking easy. The patient generally slept well, and the respiration was much more tranquil during sleep. The pulse was 112; the temperature of the hands, the cheeks, the nose, and the mucous membrane of the mouth was very low. The patient also stated that he felt alternately chilly and hot, and suffered often from copious perspiration. The urine did not contain albumen, and it was also normal in other respects.

Professor Henoch thought that the case might be one of affection of the vagus, for which supposition the pain in the right side of the larynx seemed also to speak; the pain there increased on deep pressure, and was perhaps due to the swelling of some cervical glands which were felt there. Still we should scarcely be justified in ascribing the symptoms to a compression of the vagus, as this affection causes different symptoms; even less was intoxication to be thought of, the symptoms of which are quite different, and which would not have lasted so long. I am not aware whether an examination of the spleen was made; but as there was an alternate feeling of heat and cold, and now and then copious perspiration, the case might have been one of irregular intermittent fever.

A number of remedies which have been vaunted for idiopathic vomiting, were used in this case for several months without any benefit whatever; viz., the tincture of iodine, morphia, belladonna, hydrocyanic acid, arsenic, derivantia to the stomach, and hydropathy. The hypertrophied tonsils were then excised, but the operation had no influence upon the disease. After some time, however, the temperature and the pulse became again normal, while the anomalous symptoms of respiration continued, and medicines, food, and drink were vomited; the same was the case with cod-liver oil and Tokay, which were given to improve the nutrition. Part of the nourishment administered was, however, certainly assimilated, as the nutrition was not so much impaired as might have been expected. After the patient had been under the care of Professor Henoch for about five months, creosote was ordered (gutt. x in aq dest. ʒiv. with syr. simp. ʒj. to take a tablespoonful four times a-day). After the boy had taken this mixture, he only vomited once more, and then bile, which he had never brought up before. The appetite and the action of the bowels soon became normal, the nausea disappeared, and all food, even of the heaviest description, was digested. The same treatment was continued for about a month, when his health was almost entirely re-established; some tinctura ferri chlor. was then administered (gutt. xii.) which completed the recovery.

The second case was that of a boy, aged 11, who, when he came under Professor Henoch's care, had suffered from obstinate vomiting for three weeks. The appetite was normal, the bowels open, the tongue slightly coated. The abdomen was somewhat meteoristic; no pain was complained of, but itching at the anus was often troublesome; the patient was also much emaciated and had lost strength. He was ordered to take of gutt. viii. of creosote in ʒiv. of water, a teaspoonful four times a-day. The vomiting ceased after the boy had taken the first spoonful, and never returned.

The third case was that of a man, aged 39, who had been

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syphilitic, and still showed some traces of secondary syphilis, viz., swollen glands on the neck and behind the ears, alopecia and epithelial coating of the tonsils. Disposition to tuberculosis existed in him, as was evidenced not only by occasional hæmoptysis, cough, fever in the evening, nightly sweating, but also by the physical examination of the chest. When he came under the care of Professor Henoch, he had already suffered for three weeks from continual vomiting. If he walked about he was able to keep the food on the stomach for about half-an-hour, but when he remained quiet, vomiting ensued a quarter of an hour after eating; it was sometimes preceded by cough, at other times not. There was no pain in the stomach. After he had taken ten drops of creosote in ʒiv. of water, the vomiting disappeared and did not return.

In all the cases just mentioned the effect of the creosote was so rapid and decided, that the beneficial result was evidently not only *post hoc, sed propter hoc*. An excessive irritability of the stomach, which did not allow food or even medicines to remain on the stomach, was, of course, the proximate cause of the vomiting; but it would be difficult to assign a cause of this augmented irritability. In the last case it was perhaps due to a catarrh of the stomach, which so often accompanies tuberculosis. In certain morbid conditions, which we generally comprehend under the name of dyspepsia, especially in deficient secretion of the gastric juice, in excessive secretion of mucus, in dilatation of the stomach owing to stenosis of the pylorus, the contents of the stomach undergo certain changes analogous to fermentation, and we find in them cryptogames, yest, sarcine, and penicillum glaucum. Creosote is shown by experience to be one of the most powerful remedies against fermentation and putrefaction; and its use in the diarrhœa of infants, chiefly that form which is observed in summer, is probably due to its limiting the fermentation of the contents of the intestines. The beneficial effect of creosote in cases of this description has, amongst others, been demonstrated by Dr. Turnbull, of Liverpool, in his excellent treatise on disorders of the stomach with fermentation. Whether the vomiting proceeded from such a cause in the instances mentioned above, cannot be decided with certainty, as the vomited substances were not subjected to a microscopical examination. At all events, they seem to justify us in giving creosote in dyspepsia accompanied with vomiting more largely than has hitherto been done.

DR. MEYER ON ELECTRICITY IN THE TREATMENT OF DISEASE.

Although, in most cases in which the therapeutical application of electricity yields beneficial results, great perseverance in the treatment is necessary, now and then cases occur in which the rapidity with which galvanism effected a cure is truly astonishing. Dr. Meyer, who occupies the same position here as Dr. Althaus in London, and Dr. Duchenne in Paris, recently brought a few cases of this kind under the notice of the Society. One of these was in so far remarkable, as it is probably the first well authenticated case of epilepsy cured by electricity. A man, aged 36, apparently strong and of healthy complexion, had always been well until his thirty-second year, when he began to complain of palpitations of the heart, and a sensation of constriction in the epigastrium. In October, 1859, he had a violent attack of toothache and headache. A troublesome journey, on which the patient caught a cold, mental anxiety and other circumstances increased the violence of the pain, and at last two molar teeth were extracted at the right side, with the hope of affording relief. About twelve hours after this operation, a convulsive fit ensued, which commenced with præcordial anxiety, and from the epigastrium proceeded to the head and the extremities which were spasmodically contracted. The limbs stiffened, the mouth firmly closed, and the patient lost all consciousness. The fit lasted for thirty-six hours, in spite of the application of enemas, cuppings, and blisters. The right side had been especially affected, and a permanent trembling of the right forearm and the right hand remained after the fit had ceased. From this time the epileptic fits came on three or four times every day, lasted for about an hour each time, in the day as well as at night, especially if he was in a warm room, or in company with other people. The spasms generally began in the tips of the fingers of the right hand, thence proceeded to the right arm, which was convulsed laterally, superiorly, and inferiorly. The patient then lost all consciousness, the mouth was spasmodically closed, and the muscles of the chest contracted. After this state had continued for about three months, the spasms diminished; from Easter, 1860, they came only at longer intervals, and then chiefly in consequence of mental excitement, but the trembling of the hand and the forearm continued without interruption. After the patient, who was of the Jewish persuasion, had fasted for twenty-four hours on Reconciliation-day (September), the fits returned with increased severity. They now came on again three or four times a-day, and often lasted for several hours. In this state the patient remained six weeks, when, after having consulted many Physicians, he was at last sent to Dr. Meyer. On examination of the right forearm, which was continually trembling, a disposition to close the hand, and difficult extension of the fingers upon the wrist was perceived. Dr. Meyer therefore resorted to Faradisation of the extensor muscle, which he continued for about ten minutes. The trembling now suddenly ceased, and there was no fit either on that or the next day. After the second application, a slight fit came on; the trembling, however, had almost entirely ceased, although the preponderance of the flexors still offered some resistance to a complete extension of the hand. For this reason, and in order not to lose sight of the patient, Faradisation was done five times more, after which the hand had entirely regained its use, and the trembling and fits had completely disappeared. The patient was again heard of in March last, when the report was that his health continued perfect. The case was remarkable for its origin, as an apparently insignificant irritation, which acted upon a cerebral nerve in its peripheral branches, was reflected to the brain, and caused epileptic fits, which again caused a permanent trembling of the hand and the arm. The curative effect of electricity was probably due to the improvement of nutrition in the radial nerve, which, by reflex action on the brain, caused the spasms; and no other method of applying electricity but Faradisation would have effected a cure.

Another case related by Dr. Meyer was that of a lady, aged 29, who had, when a child, suffered much from vomiting. This again occurred in July 1860, and in January last the patient lost her voice. After croton-oil, blisters and other remedies had been administered in vain, Professor Romberg sent the patient to Dr. Meyer, to try the effect of Faradisation. For the aphonia, the current was applied to the larynx, and the voice returned almost immediately afterwards; for the vomiting, the vagus was galvanised, the electrodes being placed between the arteria carotis communis and the jugular vein; and the vomiting ceased entirely after the vagus had been Faradised six times.

A third patient whose case was mentioned by Dr. Meyer, was a private secretary, aged 41, who had, when a soldier, (a) suffered much from rheumatism, which at first attacked the joints of the arm and the foot, and afterwards the shoulder. In 1851, probably in consequence of too long-continued writing, spasms of the thumb and index of the right hand took place which compelled the patient to discontinue writing for several months afterwards. Other symptoms came on in the right hand, viz., pain at the inner side of the tips of the fingers and in the upper joints of the thumb and forefinger. In 1854 and 1855 the patient used the baths of Teplitz, and afterwards the continuous galvanic current, but without benefit. In May 1859 the pain in the fingers became so violent that he could not hold his pen in the usual way, but had to take it alternately between the forefinger and the middle finger, or between the middle and the ring finger; or he fastened it by means of an ingenious contrivance to a thimble. The endermatic application of morphia and the use of veratrine did not improve his condition; and an injection of morphia into the cellular tissue caused burning pains from the point where it had been injected along the whole thumb; so that he was at last compelled to write with the left hand. A month afterwards this became also impossible, owing to violent pain in the joints of the left thumb and forefinger. The patient was now no longer able to dress himself; his food was cut for him, and he had at last to give up his employment. From June to August, 1860, he again used the thermal baths of Teplitz, but without success, after which Professor Wolff advised him to try Faradisation. On examination of the arms Dr. Meyer found that neuralgia existed in the course of both radial nerves, and anæsthesia of the skin in

(a) In Prussia every man is compelled to serve three years in the army.

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both thumbs and forefingers. The uselessness of these fingers was caused, especially in the left hand, by the pain, not by paralysis; which was also evidenced by the fact that the excitability of the muscles to the electric stimulus was quite normal. Faradisation of the skin was therefore employed, and after the first *séance* the patient was able to write for about a quarter of an hour; after the fourth he wrote the history of his case which filled five pages. Fifty-three applications of electricity were necessary to effect a cure, which is now almost complete, with the only exception of a sensation of uneasiness in the thumb which is still complained of.

PROFESSOR VIRCHOW ON A PECULIAR (SYPHILITIC?) DEGENERATION OF THE DECIDUA.

Professor Virchow recently examined the membranes of a fœtus from two to three months old which had come away from a woman who had been healthy before her marriage, but had soon after it, become hoarse, and suffered from syphilitic ulcers of the throat. These were cured by the protioduretum mercurii; she then conceived and had a miscarriage soon afterwards. The fœtal part of the membranes showed an unusually strong development of the cells of the chorion at the placental part, which looked like cylinders and were covered with long and fine epithelial cells. The maternal part of the membranes was even more changed; it had come away quite separately from the ovum itself. The whole inner part of the mucous membrane of the uterus (the decidua vera) had become loose, and only that part which covered the fundus was wanting. The change was especially striking at the posterior and anterior part of the inner surface of the decidua, where it was very thick, from one to four lines, and was covered with large, polypous growths, part of which were half an inch long, a quarter of an inch and even more broad, and three-quarters of an inch high. Their insertion was broad, and they became narrower towards the top which was bluntly rounded. Between these growths the decidua was smooth, a little wrinkled, and of a pale whitish colour. The orifices of the utricular glands were only with difficulty recognised. The whole of the external surface was rough, almost villous. The large tuberosities, which were similar to papulæ and tubercles, had a smooth and dense surface of a red colour. A hyperplastic state of the mucous membrane evidently existed, which was also confirmed by the microscopic examination; for M. Virchow found a foundation layer in which fibres were recognised, and large cells of lenticular form, which on a perpendicular cut looked like thick spindles. This hyperplastic state was no doubt due to irritation; it was an endometritis papulosa and tuberosa, which had probably caused abortion. It is difficult to say whether the endometritis was of a syphilitic nature, and whether the papulæ and tubercles were to be considered as condylomata. But this is very probable, as M. Virchow has found in the mucous membrane of the uterus of syphilitic women sometimes symmetrical, sometimes truly papulous swellings.

SWITZERLAND.

Zurich, May 16.

THE MEDICAL CONGRESS.

Some days ago the Spring meeting of the so-called Medical Congress took place here. The canton of Zurich has, amongst 267,000 inhabitants, 176 Doctors; so that there is one Medical man to 1520 people. Nearly all the Doctors belong to a Medical Association which regularly meets in this city twice a-year, and is called the Medico-Chirurgical Kantonalgesellschaft. It was founded as far back as 1810. On the 7th of May, 1860, it celebrated its fiftieth anniversary, on which occasion a special memoir was published by the Society; and it met yesterday for the 102nd time. The most active members of this Association are the Professors of this University, amongst whom I may especially mention M. Griesinger, Professor of Clinical Medicine, and author of a valuable treatise on Diseases of the Mind; M. Billroth, Professor of Clinical Surgery, formerly Assistant-Surgeon to Professor Langenbeck, of Berlin, and well known both for his great dexterity in surgical operations, and as author of several monographs, especially on pathological histology; and, finally, M. Breslau, Professor of Midwifery and Gynæcology.

Professor Billroth introduced the members of the Association to the wards of the Surgical Clinic in our beautifully situated and admirably-kept Hospital, where he showed a large number of patients on whom operations had been performed. He first drew attention to several cases of phosphorus necrosis, which disease unfortunately is increasing here in proportion to the development of this branch of modern industry, and of which during the last year no less than eleven cases have come under treatment, of which six are still in the Hospital; while in former years generally only four or five of them occurred annually. In seven of the eleven cases just mentioned, more or less extensive resections had to be performed, of which two ended fatally. In one of them death took place in consequence of tuberculosis of the lungs, after the total resection of the jaw was nearly healed; in the other by erysipelas traumaticum, which at a certain time of the year occurred somewhat frequently in the Hospital. Of the eleven cases nine were necrosis of the lower, and two of the upper jaw. A considerable disfigurement of the face is the inevitable consequence of the long suppuration and new formation of bone tissue; and it also remains after operations, which have been most successful in other respects. The opinion advanced about twenty years ago by Professor Jüngken, of Berlin, that phosphorus necrosis was not the consequence of the specific effect of phosphorous vapours, but had its origin in the cachectic condition of the men employed in manufacturing lucifer-matches, who were exposed to rheumatic influences, must be totally disregarded. The reason why phosphorus should act with preference upon the periosteum of the jaws, is, up to the present time, just as inexplicable as that mercury should have a special effect upon the mucous membrane of the mouth, calomel upon the liver, iodine upon the glands, strychnia upon the spinal cord, etc.; but the fact cannot be denied. In obstinate toothache, caries of the teeth, even in periostitis and caries of the jaws, the symptoms and results are quite different from those observed in phosphorus necrosis. This latter comes on only in consequence of a long-continued inhalation of phosphorous vapours, either as gas or as phosphorous acid. It is not unfrequently observed in persons with originally remarkably handsome and healthy teeth; in some it comes on after they have resided or been employed in the factories for a year only; in others, after five, ten, or even more years. The first symptoms of the disease are the falling out of single teeth, toothache and swelling of the jaws, which does not decrease, but continually augments. Fistulæ of the teeth are then formed; abscesses, which break either into the mouth or outwards; while at the same time the swelling of one-half or one-third of the lower jaw becomes more considerable and harder. Besides, a cachectic condition of the system generally is observed in an early stage of the disease. This is shown by pallor of the complexion, weakness, loss of appetite, acid eructations, etc. The exhaled air and the cavity of the mouth have a strong smell of phosphorous acid; and a patient who has been under the care of Professor Billroth, while at Berlin, assured him that he had often seen phosphorous, luminous appearances proceed from his mouth. This is observed even after the patients have discontinued living or working in the factories for some time. The suppuration, the formation of fistulæ, the development of new layers of bone tissue, almost always continues for months or even years; the deglutition of pus and the deficient mastication of the food render the condition of the patients worse and worse. Professor Billroth has in several instances tried an abortive treatment of the periostitis, before necrosis of the jaws had set in; but up to the present time his efforts in this direction have been unsuccessful. Deep incisions, even down to the bone, made at an early period of the distemper, in order to prevent the accumulation of pus, and to stop, if possible, by the inflammation and granulation consequent upon such operative proceedings, the process of destruction, have hitherto never led to the desired result. In cases when the patients come to the Hospital at an early period, Professor Billroth is therefore now trying the effect of a thorough mercurial and iodine treatment of the disease.

The course of the disease is usually a most melancholy one. Every few months a new attack of periostitis sets in, the demarcation proceeds further, parts which were healthy before are deadened, and even newly-formed layers of bone tissue are again destroyed. The cure, or rather the stoppage of the morbid process, if the patient do not die before by consumption,—follows only after years of suffering, in consequence of

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entire destruction and elimination of one-third, one-half, or even three quarters of the lower jaw. The disease is much less frequent in the upper jaw; but if this be attacked, the destruction is generally even more extensive. A partial or total resection of the mandibula shortens, at least, the course of the disease, which would otherwise last for years; and although extensive disfigurements remain after such an operation, it ought not to be rejected on that account, as it is the only means we have of saving the life of the patient. In operating, Professor Billroth penetrates immediately, with one incision, which he makes parallel to the necrotic part, through the skin down to the bone; he then scrapes off the periosteum with its bony layers upwards and downwards, by means of a raspatorium, and saws smaller or larger pieces of bone out of the jaw; or he nips those pieces off by means of bone-pincers. In a few cases it appeared advisable to disarticulate at once one or both coronoid and condyloid processes of the lower jaw, which was very easily done, as the joint had become very loose in consequence of the long suppuration. Of the six cases shown by the Professor, two were healed, and amongst them was one of total resection of the jaw in a woman of thirty-five years. This case was in so far remarkable, as two apparently healthy teeth had remained in the periosteum, which had become partly ossified, and in the gums, which had remained healthy; and these have now been used for seven months. Mastication is not impaired, and the woman has a much healthier appearance. The second case in which the resection of one-half of the jaw was performed, is also well healed; but the mouth is, of course, crooked. Two cases in which a partial resection has been made, are progressing favourably; in another case the treatment with mercury and iodine has been commenced. Professor Billroth requested the Doctors present at his demonstrations, and especially the Medical Officers of Health, to do all in their power to prevent the further occurrence of this disease, by ordering better sanitary measures to be taken in the factories than those in use at present.

LIVERPOOL.

June 1, 1861.

The sad calamity, with the account of which my two former letters were filled, is, I hope, likely to be the cause of greater precaution in future against similar evils. At the last meeting of the Health Committee, a Report was adopted (which had been sent in from a sub-committee appointed to consider a letter which the Mayor addressed to the Health Committee on the subject of Quarantine regulations) in which the opinion is expressed that the present custom by which the "Tide Surveyor constitutes the officer with whom rests the duty of instituting inquiries as to the state of the crew, passengers, and ships, and granting *pratique* is unsatisfactory, inasmuch as in cases of the existence of disease, your Committee consider that such duty can only be properly discharged under the direction of a competent Medical man," and further, that the regulation of the Privy Council "requiring, under heavy penalties, that the pilot of a vessel liable to quarantine shall remain on board until she is regularly discharged therefrom, except on permission of the Superintendent, is inexpedient, and should be repealed. Your Committee believe its tendency to be to deter a pilot from noticing or reporting circumstances which might subject the vessel to quarantine, whereas it is desirable to hold out every inducement to pilots to disclose such circumstances, and to inflict a penalty on concealment thereof."

The plain common-sense of these suggestions ought at once to secure their adoption; but, knowing the exceeding toughness of red-tape, there can be no doubt that a little gentle "pressure without" from the Medical press and public opinion must be brought to bear, before quarantine regulations can be forced into the mould of common-sense.

The panic which the "Egyptian fever" caused has now passed away, and the time which has elapsed since my last letter has been quite enough to convince even the most timid that we have completely escaped all danger of the spread of fever in the town. Up to last week the health of the town has been good, but at the Health Committee meeting, last week, Dr. Duncan's Report showed an increase of 42 deaths over the preceding week, and an excess of 22 over the average. The deaths were 255, the average 233, but of this excess typhus was accountable for but one. The average death-rate from this disease at this time of year being 10 per week, the number reported 11. The fact that fever has not spread here must be ascribed mainly to the improved sanitary condition of the town—how much improved may be gathered from the last Report of the Officer of Health for the borough; which shows a death-rate of 24·2 per 1000. "During the ten years which preceded the passing of the Sanitary Act, the mean death-rate was about 32·5, showing, for last year alone, a saving of not less than 3800 lives." While, on comparison with the average of the ten years from 1849 to 1859, last year shows a saving of more than 5 lives in every 1000 of the population. "Typhus, for which Liverpool was formerly notorious, caused last year only 359 deaths, the average of the previous ten years being 540; while twenty years ago, the deaths, if raised for increase of population, would give a yearly average of more than 900." The improvement has been most marked in the worst-conditioned districts."

These statements need no comment; but it will occur to many to ask, If the State delights to do fitting honour to those who have done good service on the field of battle, is it fair that those should be forgotten to whom the commonwealth surely owes something "*ob cives servatos?*"

There is one part, however, of Dr. Duncan's report that is far less satisfactory. No fewer than 96 infants were "overlain" last year, *i.e.*, smothered by their mothers. In each of these cases there is, of course, an inquest, in almost every instance a verdict of "accidentally overlain;" and the mother becomes an example to her friends and acquaintance of how easily an "incumbrance" is sometimes got rid of. How many of these cases are *intentional*, is known only to Him from whom no secrets are hid; but it is known to all who inquire into them, that a very large number are due to gross negligence, if to nothing worse; and yet this chronic infanticide, which in the most literal sense "out-Herods Herod," excites but little notice. Infant life seems somehow to be held cheaper than adult life, for I can scarcely believe that if nearly a hundred grown men and women had been done to death in one year, in one town, and by one cause, that the same apathy would prevail which apparently obtains as to the fate of these poor little victims. But it might be asked, Why are not the mothers sent by the coroner's jury to be tried for manslaughter? Simply on account of the insuperable difficulty, in almost all cases, of getting legal evidence of the fact of the child having been found lying dead under the mother. The woman herself, or her husband, finds the body, and the woman cannot be asked to criminate herself, and the husband cannot give evidence against his wife in a criminal case; so that, although it may be proved by others that the mother went to bed drunk, and laid her child, then alive and well, beside her, the case breaks down unless, as in one instance, some one besides the father or mother witnesses the discovery of the dead child. The only verdict of manslaughter returned in cases of this kind during the last thirteen years, was one where the woman's son saw a dead infant taken from under his mother. She was tried at the Assizes, and sentenced to four months' imprisonment in addition to the time she had spent in gaol before her trial. One day this week the coroner's jury had four of these cases before them, and it has happened that as many as thirteen have come under their notice at once. But I am, perhaps, occupying too much of your space on this painful point, and I turn very willingly to more agreeable and more strictly Medical subjects.

The field for Medical and Surgical observation here is embarrassingly large and varied. The general Hospitals—viz., Royal Infirmary, Northern and Southern Hospitals, provide an aggregate of more than 500 beds, the Workhouse Hospital gives 600, with power to add to their number. The special Hospitals are the Eye and Ear Infirmary, 24 beds; the Lying-in Hospital, 16 beds; the Children's Hospital, 17 beds; and the Everton Institution for Infectious Diseases, 24 beds. Assistance is afforded to an immense number of sick poor by the "Liverpool Dispensaries," North and South, and the St. Anne's, or Eastern. All sorts of cases, except midwifery, come under the care of the officers of these Institutions, while a large number of poor married women are attended in their labours at their own homes, in ordinary cases by trained nurses, in difficult ones by the Medical Officers of the Ladies' Charity. It will be remembered that in the old Infirmary

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two important Surgical innovations were brought into vogue, —the flap amputation by Alanson, the excision of joints by Park. This latter operation, which after his time fell into such unmerited disfavour, but which seems during the last fifteen years or so to have become one of the most valued of all the tactics of conservative Surgery, has been here one of the most constant and successful of the more important operations. I cannot now give you any definite statistics as to joint excision in Liverpool; but this much I may say, that at all the Hospitals, as well as in private practice, most satisfactory results have been obtained from the elbow-joint operation; that at the Infirmary the shoulder-joint has repeatedly been removed with a successful result, and the knee-joint—the first joint upon which Park operated—with somewhat varied results. There are now two cases of this kind in the Infirmary in Mr. Bickersteth's wards, one performed three months ago, or rather more, which has resulted in complete success, and the patient now walks without any support to the joint; the other, about a month ago, is progressing favourably. I have not heard of any hip-joint excisions here. There is in the same ward a case of comminuted fracture of the femur now in process of cure, ivory pegs having been fitted into holes drilled in the ends of the bones, and these united by silver wire. Operations for the radical cure of hernia (which must, in spite of the radicalism of their name, come under the domain of conservative Surgery) have had a fair trial here, and I wish I could say with the same decided success as those which I mentioned just now. Wutzer's operation has been frequently performed, and both from my own observation, as well as from what I have heard, I know that in a very large proportion of these the hernia has re-appeared. With regard to Wood's operation, I hope that the results may prove more favourable. There are at present two cases in Mr. Long's ward at the Infirmary performed recently, one of which is apparently successful. In no case have I heard of any bad result having ensued from the operation, so that in the cases of failure the patient has been no worse than before. One remarkable case, which may, I think, be regarded as a spontaneous radical cure of hernia, occurred lately at the Workhouse. The patient was a woman in the Medical ward; she had a moderate-sized inguinal hernia. No strangulation occurred; but without any known cause an erysipelatous inflammation attacked the integument over the hernia, and the whole of the protrusion, integument, hernial coverings, and the intestine itself sloughed. A most filthy, purulent, and fæcal discharge took place, and when the sloughs came away a false anus remained in the groin. The general treatment consisted mainly in the administration of opium, stimulants, and nourishing food, and the local treatment in the application of charcoal poultices and Condy's solution. Very much to the surprise of those who watched the case, the fistulous opening through which the fæcal matter came gradually closed, the fæces passed entirely per anum, and she was discharged well, apparently cured of her hernia, and is now in the healthy department of the workhouse.

Among the most interesting individual cases occurring recently, I may mention first that of a man whose arm was bitten by a horse. There was a deep ragged wound above the elbow. Some fibres of the brachialis anticus and biceps were torn, the median nerve exposed, and the brachial artery crushed, its outer coat remained entire throughout the extent of the wound; but the circulation was abruptly arrested at the upper end; there was no pulse at the wrist, no sensation in the parts supplied by the median nerve, and there was reduction of temperature in the whole forearm. The artery was tied above and below the injured part, and the intervening portion removed. The lost temperature and sensibility were regained the day after the injury, but the pulse at the wrist was not re-established. At first the wound appeared to be doing well, but after a few days assumed an unhealthy aspect—the sensibility of the parts supplied by the median nerve was again lost. Trismus came on on the seventh day after the injury, and the man died in about three days more, partly from it, and partly from exhaustion due to the discharge from the wound.

At the Lying-in Hospital there was recently an interesting case of ovarian dropsy; the cyst was unilocular and uncomplicated with any tumours; it was injected with tincture of iodine. Complete obliteration of the cavity seems to have resulted, and the patient left the Hospital apparently well.

In the Lying-in Ward of the Workhouse a woman was delivered last week of an anencephalous fœtus at about the end of the seventh month of gestation. It was a foot presentation, so that happily one of the House-Surgeons was sent for by the nurse. The little creature was distinctly born alive, the heart beating vigorously, and it moved its limbs, especially its arms, freely; but though pains were taken to make it breathe, there was never any attempt at respiration. On a post-mortem examination the lungs were found to be without the slightest change from their fœtal condition, and at the base of the skull there was a deficiency, that is most interesting in relation to the absence of any attempt at respiration. In the eighth pair of nerves only the spinal accessory could be found, no trace of the pneumogastric or glosso-pharyngeal being perceptible. There was not a vestige of any nervous matter above the level of the medulla oblongata.

A case of rupture of the heart came under investigation at the Coroner's Court last week. The man in whom it occurred was between 30 and 40 years of age, a fireman, I believe, on board a steamer, accustomed to drink freely. No immediate cause for the rupture was evident. The laceration had taken place through the wall of the right auricle, all the contents of which were extravasated into the pericardium, and with this case I must close, lest I should occupy too much of your space.

GENERAL CORRESPONDENCE.

NEW SPLINT.

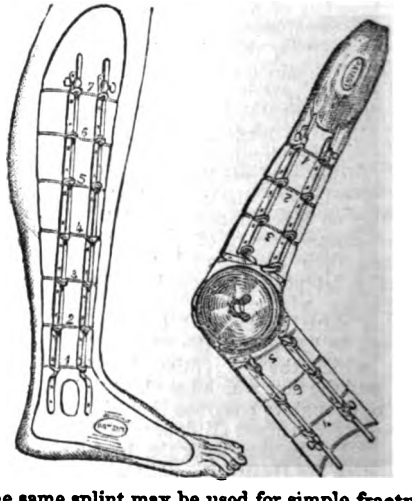
LETTER FROM DR. SKIPTON.

[To the Editor of the Medical Times and Gazette.]

SIR,—Permit me to bring to your notice, and that of the Profession through your columns, an improved *splint for* gunshot or other compound fractures of the limbs,—it consists of the common splints cut into transverse strips, which are retained in their places by slightly raised longitudinal bars at the back. The material may be iron or other metal, or even wood, though this last I should not recommend, on account of its liability to split. The advantages which this interrupt splint possesses above all others, in addition to its simplicity, are—

1st. And most important—that while the splint is applied in the usual manner, the site of the wound may be left exposed for the application of the requisite dressings beneath the raised bars, at the same time securing the cleanliness of the pads and bandages.

2nd. That, as with a Regiment on service in the field, our resources, as regards the available number of the various sizes of splints may be somewhat limited,—this same splint may be made use of for a tall man, or—by removing one or more of the transverse strips off the longitudinal bars—for a growing lad.



3rd. The same splint may be used for simple fractures, and any objection as to the extra weight, which after all is but

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slight, may be obviated by removing one or more of the transverse strips, and replacing the others with small interspaces between them.

From my own personal experience, and that of others, in the Army Medical Departments in our Hospitals at Scutari, and in the Crimea in 1854-55, and in India in 1857-58, the necessity for such a splint was urgently felt. I have had the honour to submit this splint to the Director-General of the Army Medical Department, who has manifested his approval of it by issuing an immediate order for the supply of it to the Chinese expedition, etc.

With regard to the extra expense of these splints, I have been given to understand, by the firm of Savigny and Co., 67, St. James's-street, that, the right of sole manufacturers being secured to them, and thus encouraging them to establish machinery for their production, they will be enabled to supply them at a very trifling charge above that of the common splint now in use. I am, &c.

S. Stacy Skipton, M.D.
Assistant-Surgeon to the 78th Highlanders.

The Castle, Edinburgh, April 16.

STRANGULATED UMBILICAL HERNIA.

Letter from Dr. John Potter.

[To the Editor of the Medical Times and Gazette.]

Sir,—If you can afford space in your Journal for the following case I shall feel much obliged by your inserting it:—

On the evening of the 14th of November, I was called to see Mr. L——, who was suffering from strangulated umbilical hernia. The following is the account I received from him:—For some years back he has had the hernia, but was always able with ease to put back the bowel when it came out. On the 12th he had in some way overstrained himself, and shortly after the gut came out; he made several attempts but was unable to put it back. He went to bed in the hope that rest would restore the parts to their natural position. However, the next day he again failed in reducing the swelling, but still declined sending for a Medical man. On the 14th his friends insisted upon his calling in Medical aid, and sent for me. I found him in a low state; pulse very feeble, and remarkable in its intermission; tongue rather coated; bowels costive; he had been suffering the whole day from hiccup, and vomiting of bilious fluid that distressed him exceedingly. I found a tumour at the umbilicus about the size of a large flattened orange, heavy for its bulk, with a doughy feel, very red, and inflamed in its appearance, and towards the lower portion of the under surface there was a black sphacelated spot of the diameter of a shilling. Having administered a large enema, and patiently tried the taxis without success, and seeing him too weak to resort to other measures, I urged the necessity of at once procuring the advice and assistance of another Medical man. In a couple of hours I again saw him in consultation, when the taxis was again fruitlessly tried, causing him great pain. We gave him two pills, containing in each extract. opii aquosum, capsic., āā, gr. j., creosote, gtt. ij. One pill to be taken immediately, and the second in three hours if he was awake. The first pill to be followed with a draught containing hydrocyanic acid. He was to get every second hour a teaspoonful of brandy in a little water.

15th.—We saw him about 10 a.m. Had an uneasy night; pulse very shabby and intermittent; vomiting and hiccup continued during the night; tumour very tender to the touch. As an operation was now the only resource left, and as he was still so weak, we agreed to defer it for some hours, in the hope of his gaining a little strength. Meanwhile we gave him six pills, ℞ Extract. opii aquosum, gr. ¼, creosote gtt. j., extract. hyoscyam. gr. ij. M. Fiat pil. j. mitte sextalis, j. 2dis hôris. Nourishment to be given pretty freely. In the evening, when we again visited him, he was in the same state. Not wishing to allow any more time to elapse, we got his consent to our operating. Accordingly, having placed him on a mattress on a table, with the light of three or four candles I proceeded to operate. The operation was as usual, save that I found the greatest difficulty in relieving the stricture, fearing lest I should wound the intestines which encircled the bistoury. The doughy feel of the tumour was owing to omentum filling the sac, and as some of it was adherent to the gangrenous portions, I thought it better to detach the adherent part from the main mass of the omentum, and allow it to come away with the slough. A couple of sutures were placed in the wound, and he was removed to bed. Scarcely any blood was lost in the operation. Ordered him a full opiate and a repetition of the hydrocyanic acid draught. The brandy to be continued during the night.

16th.—Slept a little last night; pulse still weak and intermittent; tongue coated and furred; hiccup still continues, but no vomiting. A couple of hours after the operation the bowels were moved. Complains of pain on the least pressure about three inches to the right of umbilicus. Ordered four leeches to be applied, and six pills. ℞ Calomel, gr. iij.; pulv. Jacobi ver., gr. vj.; extract. op. aquosum, gr. ij.; confect. aromat., q. s. Capiat j. tertia quaque hôra. Stimulants, with strong soups, to be given freely during the day.

17th.—Got an uneasy night; pulse still weak, but not quite so intermittent; hiccup still continues, and gives him great annoyance; complains of pain to the left of the umbilicus. Ordered two leeches, with the following mixture:—℞ Acid hydrocyani, ʒj.; aquæ lauro-cerasi, ʒiij.; R Hyoscyami., ʒiij.; syrup limonis, ʒj.; aqua ad ʒviij. M. Capt. cochl. ampl. secunda quaque hôra. The slough appears to be separating; there is a very offensive discharge from the wound, which has opened. Stimulants and soup as yesterday.

18th.—Got rather an easy night; pulse continues weak; the slough has come away with the piece of omentum; the wound presents very little appearance of taking on healthy reparative action; hiccup is all but subdued. As the gums are becoming tender, I stopped the pills, and gave six other pills of opium hyoscyamus and aromatic confection, one to be taken every fourth hour. Nourishment as usual.

19th.—Slept well; tongue beginning to clean, but pulse continues the same. As the bowels have not been opened since the night of the operation, I ordered an enema of beef-tea. The nourishment to be given freely, with egg-flip in addition, and a sedative pill at night.

20th.—Looks a little better; pulse improved, and not so intermittent as it has been all through; bowels well moved; directions same as yesterday. Towards evening, I was hurriedly sent for, as he was bleeding from the wound, the bandage that was around him, and portion of the bed under him, were saturated with blood, the hæmorrhage arising, no doubt, from some small vessel of the omentum remaining open; from his aspect and pulse he must have lost a good deal of blood. I steeped a small bit of lint in ℞ ferri muriatis and laid it in the wound, and over this applied a large compress of several pads of lint; ordered him brandy-punch and a mixture of bark and ammonia. I saw him late that night, the bleeding had stopped, but he was so weak that I feared he would not pass the night.

21st.—The loss of blood has weakened him very much; pulse very feeble; ordered the wine and brandy to be given every half hour, and as he likes the egg-flip, to have it every hour, with soup occasionally; the sedative pill to be repeated.

22nd.—There is a marked change for the better; aspect good; pulse much improved; the bowels were opened during the night.

There is no necessity for further continuing the daily report of this case. In a day or so I removed the compress, and the wound began to heal slowly by granulations; the sac divided by the wound has decreased to the size of a walnut, and instead of their edges uniting by granulations a regular skin covers them, so that they resemble two teats at each side of the granulating wound. In two or three weeks from the 22nd, the wound was almost closed; he was able to walk about his parlour, and felt his strength coming back to him every day. I am, &c.

Kilkenny. John Potter, M.B., L.R.C.S.I.

HOW TO GET RID OF THE INDIAN MEDICAL SERVICE.

[To the Editor of the Medical Times and Gazette.]

Sir,—One always hears about what is called "Amalgamation" of Her Majesty's Home and Indian Armies. Allow me to say a few words on that subject, as far as the Medical

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Services are concerned. Is it, in the first place, possible to "amalgamate" the Home and Indian Medical Services? If "amalgamation" means "fusion" of the two into one indivisible Service, then it is impossible. That is evident to all, and need not be argued here; were it otherwise it would have become a fact long ago, instead of remaining an eye-sore to the Indian Minister as it is still. Now, as there can be no "fusion," and the local Service must be got rid of, the sooner it is done the better for all parties concerned, provided justice is done to every member of the local Service. Let Government proceed in a business-like way, and ask each member of it individually how he will sell the privileges, etc., that are secured to him—in fact, say "We don't want you, but can't kick you out at the same time, nor can we get on well together, therefore, say what you will take to tear up your commissions and go your ways." I am sure that a very large majority of Bombay Medical men would be too willing to retire on the pension higher than they are entitled to, with some small bonus to those who lose the advantages of the Medical Retiring Fund. Of the remaining small minority many would, on the receipt of a bonus to compensate for the loss of the "privileges, etc.," be induced to join Her Majesty's Home Medical Service. Here, I may mention, that "fusion" of those who are in the two Services for not more than six or eight years is possible. The remaining few, and very few, I feel certain, might be treated according to the peculiarity of their cases.

I am, &c.

Bombay, February 26. A Bombayite.

SPONTANEOUS EVOLUTION.

Letter from Mr. Heslop.

[To the Editor of the Medical Times and Gazette.]

Sir,—Will you do me the favour to insert in your columns the following case, which may be interesting to some of your readers:—

A few days ago I was called, at an early hour in the morning, to a patient residing in the vicinity of Haverfordwest, who had been in labour about twenty-four hours. A midwife was in attendance, and upon my entering the house, during a violent bearing down pain, the right arm passed into the vagina, and was protruding externally through the vulva.

The uterine contractions were very violent, so much so, that I deemed it inexpedient to adopt the usual procedure of turning, until I had so far overcome the powerful contractions of the uterus, by the inhalation of chloroform, as to enable me without danger to turn the child and bring down the feet. On introducing my hand for this purpose, I found the head and arm closely impacted in the pelvis; and having, with much difficulty, passed my hand beyond the presenting part of the child, I was proceeding in the operation, when a violent contraction of the uterus took place, arresting my hand, and changing in a most sudden and complete manner the position of the child. The head and arm, which before were closely jammed in the pelvis, ascended, the breech and the legs simultaneously entered the pelvis, and by one vigorous contraction of the uterus, the child was immediately expelled, thus rendering further manipulation on my part unnecessary. The child was full grown and alive. The right side of the head, face, and neck, etc., were much swollen, although great pressure on these parts could not have continued long without causing the death of the child and endangering the life of the mother.

This case shows how strong were the efforts of Nature to cast off her mould,—and as in a *primâ facie* view of the case, turning would appear inevitable, she, by her own unaided efforts, occasionally gives a wonderful illustration of that peculiar mode of delivery termed "spontaneous evolution."

The introduction of my hand, which was difficult, probably elevated in a slight degree the presenting part of the child,—thus beginning, as it were, what Nature so well completed.

The mother and child are doing well.

I am, &c.

Luke C. Heslop, F.R.C.S.

est, Pembrokeshire, May 1.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, May 28, 1861.

Dr. Babington, President, in the Chair.

A letter was read from Sir Benjamin Brodie relative to the paper "On Asphyxia and the Use of the Hot Bath," by A. T. H. Waters, M.R.C.P., read at the last meeting of the Society. The letter referred to the question of the period of the continuance of the heart's action in cases of asphyxia. Sir B. Brodie had never, in his experiments on the subject, known the rhythmical contractions of the heart to continue for more than four minutes and a-half after complete submersion; and believed that if they had once ceased in asphyxia they could not be restored. Cases of recovery after a longer submersion he attributed to the action of the heart having previously ceased in a state of syncope.

A paper, by Dr. W. H. Dickinson, was read, on

THE DISEASES OF THE KIDNEY ACCOMPANIED BY ALBUMINURIA.

This paper was intended as a sequel to one by the same author in the last volume of the *Transactions*. In that communication it was maintained, on anatomical grounds, that the disease which occasions the smooth mottled kidney is essentially different from that which gives a granular surface to the organ. The first is characterised by excess of cell-growth within the tubes, and is, in fact, chronic *nephritis*; while the other is the result of a degeneration commencing in the intertubular structures. The purpose of the present communication was to add the clinical details. These were obtained, in part, from an analysis of 369 well-marked fatal cases of renal disease extracted from the records of St. George's Hospital during a period of ten years, and some of the results were given in a table. Other particulars were obtained from a more minute examination of cases under the author's notice during life, taking care to use only those in whom the state of the kidney had been attested by post-mortem examination. Both forms of disease are more frequent in the male than in the female sex: the smooth mottled kidney nearly in the rate of three to one; the granular nearly in that of two to one. The tubular disease (chronic nephritis) is peculiar to the earlier periods of life, attaining its greatest frequency between the ages of twenty and thirty. Granular degeneration is never seen except in adults, and is most common after the age of forty. These peculiarities are of the highest importance in the history of the complaints, and probably account for some of their minor differences. A further argument for the independence of the two conditions is to be deduced from the fact that persons with predispositions to gout and to the formation of tubercle are especially liable to granular degeneration. The clinical history of chronic nephritis, or the tubular disease, was then briefly treated. This complaint owes its origin to various causes of renal hyperæmia, exposure of the surface of the body to cold, the elimination of the poisons of scarlatina and other exanthemata, the irritation of turpentine or cantharides given medicinally, the vicarious secretion of bile, or the congestion of successive pregnancies. The usual duration of the disorder appears to be within six months; twenty-six out of thirty-four fatal cases under the author's own observation terminated within this period, while only two survived the year. Dropsy is the most invariable symptom of the disease, next to albuminuria. It invades the cellular tissue, the pleuræ, the peritoneum, and the pericardium, with a frequency corresponding to the order in which they are mentioned. The frequent occurrence of inflammation of the serous membranes and of the lungs in this complaint is contrasted with the great liability to bronchitis which accompanies granular degeneration. Diarrhœa, especially in the later stages, and pain in the loins, are greatly more frequent, while nocturnal micturition is less so, than with the more chronic form of disease. Coma often occurs as the sequel of epileptic attacks, particularly in

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persons who have been reduced by vomiting or diarrhœa. The urine is scanty, except during the later stages, or while a temporary attack is passing away. It is usually acid, and often deposits uric acid and urate of soda. It is discoloured with blood in a large proportion of cases, especially at the outset, and yields a bulky precipitate of albumen, independently of any such admixture. The specific gravity ranges from 1010 to 1030, but on the whole does not depart much from the limits of health. The microscopic characters of the sediment were considered somewhat in detail. Renal epithelium is deposited in a natural state, or containing oil-globules, or converted into pus cells. The fibrinous cylinders are to be regarded as casts only of the straight tubes. Though some of their materials are derived from other portions of the gland, the fibrin which gives them consistency is here supplied. They are of four varieties: transparent, uniform, glassy cylinders; similar cylinders embedding entire epithelial cells; casts of granular appearance, containing epithelium in a state of disintegration; and, lastly, such as contain blood corpuscles. All these forms are incidental to the disease, the casts embedding entire epithelial cells being the most characteristic. Granular degeneration of the kidney now became the subject of a short sketch. This is the result of gradual changes originating in the intertubular tissues of the organ, and depending upon some constitutional vice which gains ascendancy with advancing years. Large portions of the secreting tubes are actually destroyed by the process, and the blood-vessels of the gland are rendered impervious. The gradual change which the patient undergoes from health to infirmity corresponds with the slowly-increasing incapacity of the gland. This disorder can scarcely ever be attributed to any external cause, contrasting, in this respect, with what is observed in the other form of disease. The patient, perhaps, has for months a little fulness of the ankles at night, to which he does not pay much attention. The features become sharp, and the complexion sallow; and it is found, on inquiry, that for long previously the urine has been copious, and passed with frequency, especially at night. The indefinite nature of its accession renders it impossible to fix accurately the duration of the disease. In twenty-one cases, where the advent of the first symptom was made a matter of particular inquiry, this was found to have appeared at periods varying from four weeks to ten years before the death of the patient. Dropsical effusion is rather incidental to the disease than characteristic of it. In many cases it is altogether absent; in others, only slight in extent. It only comes on in the later periods of the disease, when the urine is no longer profuse. The bloated aspect and ivory pallor peculiar to chronic nephritis are often contrasted, when the kidneys are granular, with a withered aspect, sharpened features, and a muddy skin. Peritonitis, pleurisy, and pneumonia are comparatively rare, while the frequency of bronchitis is greater than with the other variety of disease. Increased frequency of micturition is usually met with, and often gives the first indication of organic change; while diarrhœa and pain in the loins are infrequent. An inquiry into the association of granular degeneration of the kidney with valvular disease of the heart led to the conclusion, that this is more frequent than can be attributed to accidental coincidence, and that the renal disturbance is usually the primary affection. Evidence was brought to show that extravasation of blood within the cranium is peculiarly apt to take place in connexion with granular degeneration of the kidney; in fact, that the latter disorder is present in nearly one-half of the cases of apoplexy subjected to examination in St. George's Hospital. The mode of connexion between the two diseases was discussed. Other "head symptoms" are apt to occur in this disease: either epileptic convulsions, as in chronic nephritis, or, what is in some measure characteristic, patients often pass gradually into a comatose state without any such warning, the change being preceded by dimness of sight, giddiness, peculiarity of manner, or delirium. The urine is increased in quantity, except in the later periods, exactly the opposite to what takes place with the more acute disorder. It is usually paler than natural, and is comparatively seldom discoloured with blood. The albumen is often in minute quantity, and the specific gravity low, varying from 1008 to 1020. The casts are various in character, but those most often present are of a coarse granular texture, and may be regarded as very characteristic of the disease.

The PRESIDENT remarked that Dr. Dickinson had very skilfully drawn a distinction between the forms of a very important disease. He wished to elicit from the members present whether such views were confirmed by their experience.

Dr. C. J. B. WILLIAMS felt unwilling to permit such a meritorious and interesting paper to pass without comment. The Author had laboured especially to distinguish the forms of a disease very constantly under notice, and whilst admitting to some extent the distinction, he (Dr. Williams) would suggest a question as to whether the granular and the smooth mottled forms were not different stages of the same affection. Many years ago, when more particularly investigating this subject, he had arrived at the opinion that the smooth and mottled kidney was the early form of the disease, which at first was attended with smoky urine from the addition of blood, and that, subsequently, as the kidney advanced to a granular condition, there was no blood and less albumen in the urine, which was of a low specific gravity, for want of its natural constituents. He (Dr. Williams) believed that he had traced some of those cases to an original congestion or inflammation of the kidney, as, for instance, after scarlet fever. Such cases would be better for treatment, and many were quite cured; but others in subsequent years would become liable to kidney disease, ending ultimately in granular disease, such as the Author had well described. He (Dr. Williams) quite admitted the anatomical differences, of disease of the cortical and of the tubular parts of the kidney, yet he considered that such differences were different stages of one disease rather than separate and definite affections. Cold, or the scarlet fever poison, might attack the tubules, and fill them with diseased epithelium, (acute desquamative nephritis); endangering life by their obstruction: but suppose this danger escaped, the same cause might proceed insidiously to attack the cortical structure and produce the granular kidney. He believed that the Author's distinctions were correct expressions of two stages of the affection in their exquisite forms. In confirmation of the Author's views, he would mention some facts connected with the association of degeneration of the kidneys with organic disease of the heart, cerebral apoplexy, and consumption. The belief in this connexion had been forced on him so strongly that he could have no doubt of it. There may be some doubt whether the affection of the heart or of the kidney took place first. He was quite sure that in some cases of heart disease the kidney became affected, and he believed that often disease of the heart killed by inducing disease of the kidneys. He had shown that disease of the heart *per se* is not necessarily a fatal disease, that the patient may live, provided he lives in a lower grade of vitality, a reptile's life, and so he may exist for many years; but when any great excretory organ became affected then would come the beginning of the end, and no organ was more likely to be the immediate cause of death than the kidney. Simple hypertrophy would lead to the same results in extreme cases, in which the force of the circulation caused an exudation of serum into the urine. On the other hand, the condition of the blood in renal disease had a peculiar effect on the action of the heart. He had seen cases in which, from a particular sound of the heart, he had been led to suspect disease of the kidney, sometimes a reduplication of the second sound, but more frequently of the first, what is often called the "cantering sound." He had seldom heard this without also finding some renal affection. Purgatives sometimes relieved this condition of the kidneys, and then the cantering sound and signs of hypertrophy would cease The association of phthisis with renal disease was not so common, as phthisis destroys life before the kidney can become extensively affected. But in instances whereby care and treatment, phthisis was protracted for very long periods, for years, he had seen death from granular disease of the kidney, as proved by post-mortem examination. The Author had insisted on the incurability of granular kidney. He (Dr. Williams) admitted that in a large majority of cases this disease was very intractable, but it was not uncommon to see old, gouty people, whose urine every now and then contained a little albumen and was of low specific gravity, and yet who lived for a great length of time. It was in his experience rare to find a kidney not somewhat granular after forty, and as such persons generally die of some other disease, it might reasonably be supposed that there were means of at least retarding the progress of the disease during life, just as phthisis might sometimes be kept

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comparatively quiet for many, even thirty or forty, years. In conclusion, he thanked the Author for his endeavours to clear up the obscurity which still hung over this subject.

The Author remarked that in his paper he dwelt on the anatomical conditions he had found after death, and the symptoms associated with each form during life. In reference to the case Dr. Williams had brought forward, in which it was supposed that granular disease of the kidney had followed on nephritis after scarlet fever, he would remark that there was, it would appear from Dr. Williams's remarks, no post-mortem; and, again, the symptoms in very advanced states of the "smooth" form of kidney disease were often the same as those of the granular form. In alluding to the incurability of the granular form of the disease, he meant simply that the granulations could not be altered, and not that the disease must be rapidly fatal—that the anatomical change of the structure was beyond the reach of medicines.

Dr. Gull had not noticed that the Author had alluded to a recent recognition of a third form of kidney disease, depending on amyloid degeneration of the arteries. It was easily diagnosed at the bedside, and was associated with scrofula and phthisis. He (Dr. Gull) recognised a form of cirrhosis of the lung, associated with cirrhosis of the kidneys. In the amyloid form, which might now be admitted as a third form of renal disease, the kidney was waxy, of a dull yellowish colour, almost homogeneous on section. Thus then there were three forms each attacking a special structure, the tubular, the intertubular, and that associated with degeneration of the arteries. He did not doubt but that these forms might occur separately, but clinically they often occurred together. He had seen granular degeneration of the kidneys follow after scarlet fever, as proved by post-mortem examination. He could confirm Dr. C. J. B. Williams's views as to the association of granular disease of the kidneys and disease of the heart, especially aortic disease with regurgitation. The kidney being of all organs the most arterial, might be expected to suffer first from such a cause. He had often seen disease of the heart terminate in renal disease. Dr. Bright believed that disease of the heart was secondary to disease of the kidneys. There was one symptom to which the Author had not alluded, which was important, viz. the presence of ammonia in the breath: it was especially to be noticed in those cases in which there was little or no albumen in the urine. He (Dr. Gull) alluded to cases in which the chief symptom was trembling of various muscles and constant jactitation. In such cases he was struck by the peculiar smell of the breath, and from it was led to suspect renal disease. In one case he tested the urine, but found no albumen. The patient, however, only passed about twelve ounces in a day, and the specific gravity was as low as 1006. The heart became weaker. The patient was troubled with constant jactitations, and at length died, without general convulsions or insensibility. In the small kidney he had frequently seen people die in this way. The breath might be tested by litmus paper, which was turned from red to blue.

The President apprehended that the Author did not intend to give a complete history of the various affections often grouped together as Bright's disease, but to distinguish the two forms alluded to in his paper.

The Author replied that he had limited himself to the discrimination of the two forms of kidney disease mentioned. He must have written at much greater length if he had entered into the subject of amyloid degeneration.

WESTERN MEDICAL AND SURGICAL SOCIETY.

The President in the Chair.

Dr. Martyn related some cases of

PLACENTA PRÆVIA

which had occurred in his practice. Mrs. D., aged 30, in her fifth pregnancy at full time (on November 22, 1860, at 11 p.m.), having a slight pain in the abdomen she went to the closet, when a great discharge of blood took place. She became faint and much alarmed. No other symptoms occurred until the following morning, 7 a.m., when, with slight pains, nearly half a chamber-vessel full of blood was suddenly passed. The Author was then called in, who found her lying on her bed blanched, and complaining of feeling very tired, and that she thought she should die. The vagina was found full of blood, and her hips were in a pool of it. The os uteri was high up, soft, and dilateable, admitting two fingers readily; the placenta distinctly over-lapped the os; the head of the child could be felt above the brim of the pelvis. There was little or no uterine action, and the pulse was very feeble. Her previous labours had been mostly over after three or four brisk pains. The hand was used as a tampon while support was given, in consequence of the exhaustion of the patient, and a full dose of ergot was administered. The placenta was then separated from around the os uteri in the manner directed by Dr. Barnes. Fresh hæmorrhage coming on soon afterwards, accompanied with slight pains, compelled the Author to rupture the membranes and complete the delivery by version. This was accomplished in twenty minutes,—a longer time than was absolutely necessary,—but the Author preferred taking time and supporting his patient rather than add to the existing danger by a hasty delivery. Dr. Martyn did not think that any advantage was gained by partially separating the placenta in this instance. The child had a feeble action of the heart for thirty minutes after birth, but no efforts, neither the ready method nor inflation of the lungs perseveringly applied, could induce the least attempt at respiration. The patient slowly recovered, but suffered from pelvic inflammation and phlegmasia dolens. The second case occurred to a Mrs. G. in her sixth pregnancy at the eighth month. Her previous labours had been tedious from slow uterine action. Dr. Martyn saw this patient on November 18, 1860, there being symptoms of approaching labour. At 5 p.m., with a slight pain she had a discharge of blood. At this time the os was high up and nearly out of reach and undilated. An opiate was given. Shortly after, pains came on of a stronger character, nearly each was attended with a slight loss of blood. At 5 a.m. of the next day, the patient being out of bed, a sudden gush took place, when she fell on the floor quite faint. The Author being engaged with another case, his assistant attended and found her insensible. A sharp pain soon came on, and expelled a dead child. Which had, however, every appearance of being alive up to the time of the great discharge of blood. The placenta immediately followed the birth of the child. The mother made a slow recovery, having an attack of pelvic inflammation. Dr. Martyn thought from the symptoms that this was a case of placenta prævia, although its presence was not discovered at the os uteri previous to the birth of the child. A third case occurred in the practice of a friend, to whose assistance the Author was called. The patient had borne several children. Towards the close of the pregnancy she was alarmed by a great discharge of blood. When Dr. Martyn saw her there was not much hæmorrhage going on, nor was she greatly exhausted, but it was considered advisable to bring about her delivery. The os uteri not being much dilated, it was thought best to adopt Dr. Barnes' method of detaching the placenta from its attachment to the os, and, if possible, trust to the natural efforts for the delivery of the child, at the same time closely watching the case. The membranes were artificially ruptured. There was but little loss of blood from these proceedings; but the funis soon coming down, version was performed, and a dead child extracted. The mother recovered well. The Author had attended the same patient on two previous occasions, when hæmorrhage took place at the eighth month, so sudden and profuse as to cause syncope. Rupturing the membranes and giving support was the treatment adopted on both occasions. A dead child was expelled by the natural efforts in each case without further loss of blood. The placenta was not detected at the os on either occasion. Dr. Martyn raised the question whether the delivery should not have been effected by turning, as soon after the occurrence of the hæmorrhage as possible, with the idea of saving the life of the child, for he thought that when there are signs of the placenta being situated in the lower zone of the uterus, the danger, while great to the mother, was in a tenfold degree more so to the child. The Author then made same remarks upon the various modes of treating these formidable cases, calling attention especially to the plans introduced by Dr. Simpson and Dr. Barnes. Dr. Martyn had met with nine cases of unavoidable hæmorrhage in 1004 cases of labour. One was fatal to the mother, and seven to the child.

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Mr. CUMBERBATCH then related a case of

PHLEGMASIA DOLENS,

occurring as early as the second day after delivery. The labour had been lingering, and accompanied with much suffering. The symptoms began with loss of power in the legs, excessive tenderness in the course of the veins, also abdominal tenderness. There was great constitutional disturbance. The veins soon became knotty and hard, and the legs œdematous. Her life at one time appeared doubtful; but after active treatment with fomentations, calomel, opium, and antimony, she recovered.

JUNIOR MEDICAL SOCIETY OF LONDON.

THURSDAY, MAY 30, 1861.

Mr. ALEXANDER SQUIRE (Univ. Coll.), President.

THE Society met at Charing-cross Hospital.

A Paper, by Mr. EDGAR A. BROWNE, V.P., was read, on

EXCISION OF THE KNEE-JOINT.

After passing rapidly in review the history of the operation from the time of Hippocrates to the present day, the Author proceeded to discuss the merits of excision. He pointed out that excision was not, as many supposed, a cure for knee-joint disease, but, under certain circumstances, an admissible substitute for amputation. In any fashionable operation little reliance could be placed on statistics, as it was to be feared that many Surgeons had taken out knee-joints where they should have removed limbs. However, it might be stated that at one large Hospital (Guy's) they had reduced the death-rate for amputation to 14·5 per cent.; but that at another (Jersey) the mortality for excision in similar cases, was no higher than 7·5 per cent. The statistics for all the recorded cases of excision were 21·54 deaths, 11·05 subsequent amputations (of which 9·5 die), and 67·4 recoveries. A high rate of success could only be obtained by due and proper selection, and it was necessary that the patient's general health should be as good as possible. A successful case of Mr. Hancock's, in which deep abscesses extended half way up the thigh and as far down the leg, was related to show, how largely the soft parts might be diseased without militating against the operation. Mr. Barwell's rules for the state of the bones were cited. The operation was admissible only when the disease was within certain limits, and in young subjects those limits were within the boundary line of the epiphyses, removal of which was tantamount to stopping the growth of the limb. Further evidence was wanted to show how far articular fractures were to be healed by excision. The paper was illustrated by cases and by pathological specimens.

Mr. YEO, of King's College, related the particulars of four successful cases of the operation at that Hospital.

Mr. ROUSE, of St. George's Hospital, thought it had been practised too recklessly in trivial cases considering the mortality was so high.

Mr. LEACHMAN, of University College Hospital, said the operation was not in much favour at that Hospital.

Mr. KING, of the London Hospital, mentioned two cases, one for disease and the other for gunshot wound, both unsuccessful.

Mr. MEGGY, of Guy's Hospital, believed that rest would have cured the majority of successful cases.

Mr. GALTON, of Guy's Hospital, related a case in which the cartilage had been exposed, and was seen ulcerated. Cured by rest.

Mr. TRAVERS, of Charing-cross Hospital, doubted whether mere rest would be efficient for many cases cured by excision.

Mr. VENNING, of St. George's Hospital, thought much depended on whether the disease were strumous or not.

Mr. R. M. MILLER, of University College Hospital, related two successful cases, in which complete use of the limb was restored.

Mr. SHORT, of Charing-cross Hospital, related a successful case he had met with in the country.

Mr. BROWNE, of Charing-cross Hospital, briefly replied.

There were various pathological specimens exhibited under the microscope.

The PRESIDENT showed a specimen (for which he was indebted to Dr. Jenner) of complete collapse of both lungs, occurring in a highly rickety child. The child, who had a slight cough, had been crying a good deal during the day, and was found dead in bed the following morning. At the post-mortem complete collapse of both lungs was found.

A cordial vote of thanks to the Students of Charing-cross Hospital for having so handsomely entertained the Society was carried by acclamation.

This was the last meeting of the Session.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND (a).—The following gentlemen passed their Primary Examinations in Anatomy and Physiology at a meeting of the Court of Examiners on the 28th and 29th ult., and when eligible will be admitted to the Pass Examination:—

Attwood, James Lewis Lyndon
Autey, William
Bennett, Sidney
Booth, F. W., Manchester
Bothwell, George Granville
Couch, John Quilter
Cronin, Eugene Francis
Davey, J. S. E.
Davidson, Andrew
Deans, John
Deville, Titus
Eddowes, A. Benjamin
Edwards, John
Fawcus, Henry Robert
Ferguson, Daniel William
Fernandes, Albert Luis
Fletcher, Henry Studd
Forrest, John Phelan
Fryer, John
Gilsou, F. G. S.
Heaps, John
Henry, John M'Williams
Hunt, Walter
Jaap, John
King, Daniel Joseph
Knapp, Henry Leigh
Murlin, John
Norton, William Augustus
Owen, Francis Meredith
Pearson, Thomas Robert
Pettinger, William Murr
Prater, Charles Augustus
Reid, James Giskard
Roberts, James Dixon
Row, William
Sargent, George Pearse
Smart, Andrew
Smith, John
Spencer, John Alexander
Stieglitz, Lewis Fred. von.
Thompson, Thomas
Ward, Henry Augustus
White, John Gregory
Williams, John
Williams, William Morgan

The following gentlemen, having undergone the necessary Examinations for the Diploma, were admitted Members of the College, at a Meeting of the Court of Examiners on the 3rd and 4th inst.:—

Allingham. J. H., Finsbury-square
Arthur, J., Guernsey
Atkinson, S. S., Newcastle
Bockett, G. M., Calcutta
Bogg, T. W. Louth, Lincolnshire
Bond, C. R., Dalston
Brett, W., North Audley-street, W.
Copland, F., Chelmsford
Croker, J. R., Islington
Croskery, R., Belfast
Deville, T., Paris
Foster, T., Newcastle-on-Tyne
Galbraith, C. J., Melbourne
Garner, R. C., Stoke, Staffordshire
Harland, H., Fletching
Hirst, S. C., Wakefield
Hollinworth, J., Hyde, Manchester
Hunt, A. D., Chagford
Husband, E., Normanby
Jaap, J., Paisley
Jones, W., Whitehaven
Jones, R. O., Bala, Merionethshire
Jones, T., Rhyl, Flintshire
Kempe, C. P., Crugsillack, Cornwall
Leaf, W., Leaf-square, Manchester
Lewis, F., Paddington-street
Lintzgy, W. J. V., Calcutta
Lumley, B., Corbridge
Marsh, F. H., Brome
Nash, W., Ilford
Phillips, J. M., Cardigan
Rickets, F. W., Liverpool
Robson, M. J., North Shields
Rutter, J., Wandsworth
Shapland, J. D., N. Malton, Devon
Simmons, D. P., Olney
Spalding, W., Maryland, U.S.
Sutton, C. F., Cambridge-terrace
Tyley, R. P., Wells
Ward, C. P., Gloucester
Webb, J. W., Abersychan
Wilcox, R. W., Torrington-square
Wine, R. C., Bristol

(a) This College is the only one which does not send lists of New Members to the Medical Journals.—Hence frequent mistakes, for which the Journals are not responsible.

APPOINTMENTS.

CHEESEMAN.—Dr. John Cheeseman has been appointed to the offices of House-Surgeon and Secretary to the Newark on-Trent Dispensary and Hospital, vacant by the resignation of Dr. Irving.

COOPER.—Mr. Alfred Cooper, has been appointed Surgeon to the Islington Dispensary, in the room of Mr. J. H. Jackson, resigned.

EARLE.—James Lumley Earle, M.R.C.S. and L.S.A., late Resident Accoucheur at King's College Hospital, London, has been elected Resident Surgeon-Accoucheur to the Birmingham General Dispensary, in the place of Mr. Candy, resigned.

SMITH.—Mr. James Thomas Smith has been elected Junior Resident Surgeon to the Birmingham General Dispensary, in the place of Mr. Garner, now Senior Resident Surgeon.

JACKSON.—Dr. Hughlings Jackson has been elected Physician to the Islington Dispensary, in the room of Dr. Webb, resigned.

DEATHS.

ANDERSON.—June 1, James Anderson, of Mount Pleasant, Bothwell, Lanarkshire, L.F.P.S. Glasg,

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BLANDFORD.—June 2, Silas Blandford, of Wincanton, Somersetshire, late of Chester-square, Surgeon R.N. on the Retired List (seniority March 14, 1805.)

BROWN.—May 22, at Winlaton, Durham, Francis Saunderson Brown, (in practice prior to 1815) aged 75.

DEHAY.—May 29, James Dehay, of Market-place, Wokingham, aged 87.

GRAHAM.—April 10, at Arequipa, Peru, J. Alfred Graham, M.D.

KER.—June 2, at Calton Hill, Edinburgh, Thomas Ker.

LOWRY.—April 30, at Bombay, after a short illness, James Lindsey Lowry, M.D., F.R.C.S., &c., aged 49.

MATTHEWS.—May 29, at Manchester, Samuel Matthews, (in practice prior to 1815,) aged 68.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—The following gentlemen will be balloted for as Fellows of this Society on Tuesday evening, June 11, 1861:—Messrs. Claudius Francis du Pasquier, George Bacon Sweeting, James Walsh, John Soelberg Wells. The Ballot will be opened at half-past seven o'clock, and will close at half-past eight precisely.

ROYAL COLLEGE OF SURGEONS.—Professor Hilton will commence his course of six lectures "On the Influence of Rest in the Treatment of Surgical Diseases and Accidents," on Tuesday, June 11, at four o'clock; and continue them on alternate days until completed.

SOCIETY OF ARTS.—The second *conversazione* of this Society took place at the South Kensington Museum on Saturday evening, the 1st inst. The company was received by Sir Thomas Phillips, F.G.S., Chairman of Council, supported by the members of Council. About 4000 persons were present, and a very interesting evening was passed.

SURGICAL DEGREES AT CAMBRIDGE.—Dr. Humphry will deliver a course of lectures on the "Principles and Practice of Surgery," during the summer months, commencing on Monday, June 3. Mr. Lestourgeon will deliver a course of lectures on "Midwifery," during the summer months, commencing on Wednesday, June 5. These courses of lectures are intended for gentlemen preparing for the degree of Master in Surgery.

LONDON MILK.—We read of a case this week in which Mr. Serjeant Hayes and Mr. R. E. Turner were for the plaintiff, and Mr. Chambers, Q.C., and Mr. Shaw for the defendant, in an action to recover damages for the misrepresentation of the value of a milk business. The most important point which arose during this trial was, as the learned Serjeant observed, a very satisfactory one to the public. It appeared that, although sixteen barn gallons of pure milk were manufactured into twenty-four of ordinary milk, yet nothing but pure water was used in the adulteration.

ROYAL MEDICAL BENEVOLENT FUND SOCIETY OF IRELAND.—The annual meeting of the above Society was held on Monday, the 3rd instant, in the Library of the Royal College of Surgeons; Dr. Robert Adams, President of the College, in the chair. The chairman congratulated the Society on the permission obtained from her Majesty since the last annual meeting, through the instrumentality of the Lord-Lieutenant, to adopt the prefix "Royal," as part of the designation of this Society, as well as on the fact that the Queen's representative in Ireland had been pleased to accept the Vice-Patronage of the Institution. He alluded with regret to the failing health of the philanthropic founder of the Society, Dr. Kingsley, of Roscrea, as well as to the circumstance that there is this year a falling off in the amount of the receipts, while there is an increase in the number of the applicants for relief. Dr. Beatty proposed a resolution, which was seconded and adopted: That a Medical Practitioner resident in each town should be appointed as agent, to further the objects of the Society. Dr. J. F. Duncan, who has filled the office of Treasurer for the last nine years, having resigned, Dr. Valentine Duke was appointed in his stead.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At a meeting of the College, held on Monday, the 3rd instant, the following gentlemen were elected as President, Vice-President, and Council for the ensuing year:—*President*, William Jameson, M.D.; *Vice-President*, Thomas L. Mackesy, of Waterford. *Council:* James W. Cusack, Arthur Jacob, Thomas E. Beatty, Robert Adams, William Hargrave, James Barker, William Colles, Hans Irvine, Edward Hutton (Secretary), Robert Pentland (Drogheda), Samuel G. Wilmot, Awly P. Banon, Peter Shannon, Hamilton Labatt, Josiah Smyly, Benjamin M'Dowel, Maurice H. Collis, Edward Ledwich, and Christopher Fleming. The election of a provincial Fellow to the office of Vice-President is a novelty, and now that iron roads have brought the principal towns within a few hours of Dublin, it is to be hoped that the leading Practitioners in the provinces will, from time to time, be allowed thus to participate in the highest honours in the Profession. No more fitting person could be chosen in whom to establish such a precedent than Dr. Mackesy, eminent as a Practitioner, respected in private life, and surpassed by none in public spirit, and in zeal for the honour and welfare of the Profession.

IRISH MEDICAL ASSOCIATION.—The annual meeting of this Association was held in the Royal College of Surgeons in Ireland, on Monday, the 3rd inst. The chair was taken by Dr. Mackesy, of Waterford. The Report referred to the part taken by the Association in reference to the Bill for the Amendment of the Poor-law and Medical Charities Act, and for the registration of births, deaths, and marriages in Ireland. Early in October a sub-committee was appointed to make preparations for the approaching session of Parliament. The committee, after giving much time and labour to these subjects, prepared their report, the substance of which was:—That the Poor-law inquiries into charges against Medical officers are investigated and conducted in a manner contrary to the spirit of the British Constitution; that the exclusion of the cases of injury and sickness from the poor-house Hospital is oppressive to the poor and embarrassing to the Medical officers; that the law and orders regulating vaccination are unsatisfactory and inefficient, and the remuneration quite inadequate to the importance of the duty performed; that the salaries of the Medical officers are generally insufficient and disproportioned to the duties required of them; that a provision for granting pensions or superannuation allowances to Medical officers is urgently needed and called for; and, finally, that the proportion of Medical Inspectors to the Poor-law Inspectors should be rather increased than diminished, as proposed by the Poor-law Commissioners. Allusion was made to the refusal of the latter functionaries to sanction the increase voted by the Board of Guardians of the Abbeyleix Union, by a large majority, of the salaries of all their Medical officers to £100 per annum, and to similar interference in other instances. Lastly, the deep regret of the Association was expressed for the severe losses it had sustained in the removal, by death, of some of its most distinguished members: Professor Porter, Drs. Robert C. Williams, Roe, Colvan, and Gore. Dr. Beatty was elected President for the ensuing year; Dr. Darby Chairman of Council, and the Council was re-elected.

DANGEROUS COSMETICS.—At a recent sitting of the French Academy of Medicine, Dr. Réveil read a paper "On the Necessity of Preventing Perfumers from Selling Poisonous or Dangerous Articles," which should be exclusively left to the responsibility of regular chemists, and not sold without a Physician's prescription. "To show the danger there is in allowing the unchecked sale of certain compounds," he said, "I need but state that arsenic, the acid nitrate of mercury, tartar emetic, cantharides, colchicum, and potassa caustica form part of their ingredients. The kind of soap called lettuce soap, which is sold with the announcement that it has been acknowledged by the Academy, does not contain the slightest trace of lettuce. This and other soaps are all coloured green by the sesqui-oxide of chromium, or of a rose colour by the bi-sulphuret of mercury, known as vermilion. Some which are cheaper contain 30 per cent. of insoluble matter, such as lime or plaster, while others contain animal nitrogenous matter which, having escaped the process of saponification, emits a bad smell when its solution is left exposed to the air. The various toilet vinegars are so far noxious that, being applied to the skin still impregnated with soap and water, they give rise to a decomposition, in consequence of which the fatty acids of soaps, being insoluble in water, are not removed by washing, become rancid, and cause a chronic inflammation of the skin. The preparations employed for hair-dye under the pompous names of 'African water,' 'Florida water,' etc., all contain nitrate of silver, sulphur, oxide and acetate of lead, sulphate of copper, and other noxious substances. All cosmetics for removing hairs or freckles are dangerous; the *lait antéphélique*, for instance, contains corrosive sublimate and oxide of lead. Were a chemist to deliver such remedy to a customer without a regular prescription, he would be liable to

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a fine of 6000f." Dr. Réveil concluded by expressing his regret that certain Physicians should so far forget their own dignity as to lend the support of their names to such noxious inventions.—*Galignani's Messenger.*

BOOKS RECEIVED.

On Tubercular Leprosy. By A. Abercrombie, M.D. Edinburgh: 1861.

Manual of the Practice of Medicine. By T. H. Tanner, M.D. Fourth Edition. London: 1861.

On Epilepsy and Epileptiform Seizures. Second Edition. By E. H. Sieveking, M.D. London: 1861.

A Week at the Land's End. By J. T. Blight. London: 1861.

Explorations and Adventures in Equatorial Africa. By Paul B. Du Chaillu. London: 1861.

A Manual of Botany. By R. Bentley, F.L.S. London: 1861.

On the Influence of Atmospheric Changes on Disease. By A. Ransome, M.B., and G. V. Vernon, F.R.A.S. Manchester: 1861.

Buxton Thermal Spring. By J. A. Pearson, F.R.C.S. Liverpool: 1861.

Statistical Report of Cases of Insanity. By G. P. Smith, M.D. Leeds: 1861.

The Anglo-Turkish Bath. By Y. J. Moore, M.R.C.S. London: 1861.

Traité des Fractures chez les Enfants. Par Dr. A. Coulon. Paris: 1861.

Iron as a Material for Ship Building. By "F.R.S." London: 1861.

The Genealogy of Creation. By H. F. Pratt, M.D. London: 1861.

VITAL STATISTICS OF LONDON.

Week ending Saturday, June 1, 1861.

BIRTHS.

Births of Boys, 972; Girls, 987; Total, 1959.
Average of 10 corresponding weeks, 1851-60, 1523·4.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	549	520	1069
Average of the ten years 1851-60	518·6	497·4	1016·0
Average corrected to increased population..	..	..	1118
Deaths of people above 90	1	2	3
Deaths in 15 General Hospitals	28	16	44

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1851.	Small pox.	Measles.	Scarlatina.	Diphtheria.	Whooping-Cough.	Typhus.	Diarrhœa.
West	376,427	..	3	6	1	14	1	1
North ..	490,396	1	5	4	5	12	5	2
Central ..	393,256	..	4	1	4	13	2	5
East	485,522	..	..	7	2	21	7	2
South ..	616,635	1	3	10	6	34	7	2
Total.. ..	2,362,236	2	20	29	18	94	22	12

Medical Times and Gazette.

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NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dr. Simpson's Lecture "On the treatment of Amenorrhœa" is in type, and will appear next week.

Mr. Teale's important Paper on Amputations in the Leeds Infirmary will appear on the 29th inst.

Mr. Buchanan can obtain ivory points charged with vaccine lymph *gratis* by applying to the Vaccine Institution, Russell-place, Fitzroy-square.

An Old Subscriber.—1. Yes, and recover reasonable charges for medicines supplied in Surgical cases. 2. No. 3. No.

The Report of *Mr. Lane's* paper at the Harveian Society has been in type some time, and is only delayed by the crowded state of our columns.

A Subscriber wishes to know where he could get Dr. Mitchell's Paper on the Superstitions Relating to Lunacy; also if there is any work published on Lunacy Superstitions.

Errata.—Page 560, line 20, *for* "persisted," *read* "pre-existed." Same page, line 31, *for* "vesicularisation," *read* "vascularisation."

D. H.—No good could possibly be done by the publication of our correspondent's letter: a man who would prevent a patient from having the benefit of the skill of a Surgeon known to be experienced and successful in an important and difficult operation, because he differed from that Surgeon on a point of professional policy, must be something more than a pedant.

An Old Subscriber.—We are not responsible for the opinions of our correspondents, and our columns are open to replies.—We do not hold that it is sound policy to exclude a letter from an old contributor, of some standing in the profession, (such as *Tranquillus,*) because his sentiments may be unpopular. A system of gagging never answers; unsound opinions, like ill humours in the blood, ought to come out and be dealt with. Homœopathy and Medicine are alien and antagonistic: if one be true, the other is false: just as the proposition that a part is greater than the whole (the true Homœopathic dogma) is inconsistent with physical science. Consultation with Homœopaths is absurd and impossible. For an Hospital Surgeon to come in at the death-bed of a Homœopathically-treated patient, and pronounce "everything done rightly," is mean and mischievous. But there may be doubts how far we are justified in refusing aid to patients in an extremity merely because they have been adherents of Homœopathy. We think that under no such circumstance ought a Physician or Surgeon to fail to express his disapprobation of Homœopathy, or the fact that it is a system opposed to Medicine; therefore he cannot consult with Homœopathic Practitioners. As for exceptional cases, the rule "that life must not be jeopardized," should, in our opinion, be strictly observed.

COMMUNICATIONS have been received from:—

Professor Simpson; Mr. Teale, Leeds; Professor Laycock; Dr. Anderson; Mr. Aveling; Dr. Wiblin; Mr. R. Ellis; Mr. Holmes; Mr. Cooper; Dr. Worms, Paris; Dr. Young, Edinburgh; Mr. C. George; Mr. Bell; Mr. Nash; Dr. Potter; Mr. Baldock; Mr. O'Connell; Mr. Buchanan; Mr. Snowe; Mr. Burbery; and our Correspondents at Paris, Breslau, Zurich, Berne, &c.

APPOINTMENTS FOR THE WEEK.

June 8. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

10. Monday.

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

11. Tuesday.

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

Royal College of Surgeons of England, 4 p.m. Professor Hilton "On the Influence of Rest in the Treatment of Surgical Diseases and Accidents."

Royal Medical and Chirurgical Society, 8 p.m.—Ballot 8½ p.m.—Mr. Oliver Pemberton, of Birmingham, "On a Case of Aneurismal Varix." Dr. W. F. Wade, of Birmingham, "On a Case of Aortic Aneurism."

12. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

13. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.

Royal College of Surgeons of England, 4 p.m. Professor Hilton "On the Influence of Rest in the Treatment of Surgical Diseases and Accidents."

14. Friday.

Operations, Westminster Ophthalmic, 1½ p.m.

Samaritan Free Hospital Lectures, 4 p.m. Dr. Routh "On Endo-Metritis."

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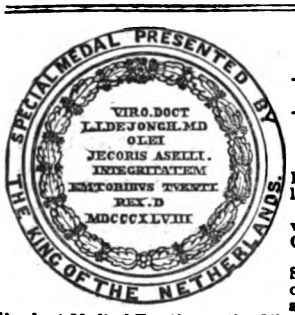

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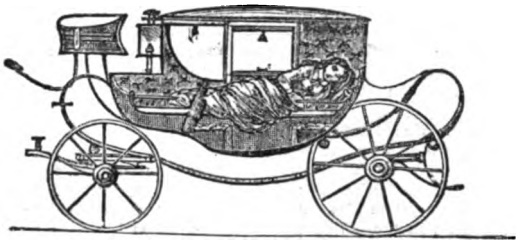

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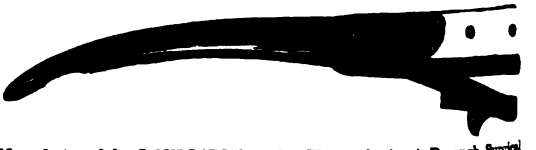
Vide Medical Times and Gazette, January 12, 1861.



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ORIGINAL LECTURES.

CLINICAL LECTURES ON THE DISEASES OF WOMEN.

By J. Y. SIMPSON, M.D., F.R.S.E.
Professor of Medicine and Midwifery in the University of Edinburgh.

Lecture XXXVIII.—*continued.*

AMENORRHŒA: ITS LOCAL TREATMENT.

It not unfrequently occurs in practice that, after having attended to all the indications which I have laid down, and after having used the several varieties of remedial measures that I have described, still the amenorrhœa persists. The general health and powers may be restored, but still the catamenial discharge does not return.

A local action or irritation sometimes requires to be superadded in order to initiate the menstrual action; just as the clock, though duly and fully wound up, will not tell the march of time till the pendulum is swung. And again, there are other obstinate cases of amenorrhœa connected with imperfect development of the uterus or with atrophy and superinvolution of the uterus after delivery, or—let me add, with threatened phthisis and chest disease,—where the local treatment is necessary from the first, inasmuch as in these forms mere constitutional treatment usually and utterly fails to cure the disease.

By the term "local treatment" of amenorrhœa we understand the direct application of local therapeutic stimulants or excitants to the vaginal canal or, more specially, to the uterus or uterine cavity itself. Let me speak of—

1. Local Emmenagogues Applied to the Vagina.

I have already, in the remarks that I made upon the specific treatment of amenorrhœa, alluded to the injection into the vagina of a solution of Aqua Ammoniæ in milk as a means of exciting the menstrual secretion. The injection is made by adding a teaspoonful of aqua ammoniæ to the pint of milk. But I readvert to the subject of local means applicable to the vagina for the cure of amenorrhœa chiefly with the object of observing that the ancient Physicians appear to have been much in the habit of employing in amenorrhœa local measures of this description. In those writings of the Greek, Roman, Arabian, and Mediæval Medical authors that refer to the diseases of women, you will find constant references to the treatment of amenorrhœa by local stimulants introduced into the vagina. These stimulants were applied under the various names of "suppositoria vaginalia," "balani," "nascalia," etc., but usually they were spoken of in the literature and practice of those ancient times under the name of pessaries. In modern obstetric practice the term pessary has been usually limited to mechanical supports introduced into the vagina for the purpose of supporting the uterus when prolapsed or displaced. In ancient obstetric language the term was far more generally applied to various medicated applications introduced into the vagina for the cure of uterine functional diseases, as amenorrhœa, menorrhagia, etc. When used for these medical purposes, the pessaries of the ancients usually consisted of medicated ointments or liniments spread upon elongated pieces of wool; and sometimes of stimulating ingredients incorporated with honey or other semi-unctuous substances and enclosed in a linen bag. "A pessary," to quote the definition of Paulus Æginets, "consists of carded wool, rounded to the shape of the finger and impregnated with the medicines." Now, the drugs used in the formation of these ancient medicated pessaries appear to have been both very numerous and very various. For they included oils, juices, and other suitable preparations, from all that long, long list of emmenagogues in which the ancients believed. These emmenagogues would act, they seem to have supposed, upon the uterus, whether introduced into the stomach or applied to the vagina. They comprehended also various direct local stimulants,—as turpentine, cantharides, verdigris, or acetate of copper, etc. I am not aware that, in modern times, medicated pessaries have been employed with the view of producing an emmenagogue action; and the fact of their total disuse for this purpose is, perhaps, the strongest argument against their power to produce any effect upon the stimulation of the menstrual secretion. You are aware, however, that medicated pessaries containing bismuth, iodide of lead, mercury, morphia, belladonna, etc., are used successfully in uterine therapeutics for other purposes. In using for the reduction of uterine neuralgic pains and supersensibility belladonna pessaries, with a few drops of oil and chloroform introduced into their centre,—a plan which is often of great use in hysteralgia,—I have sometimes fancied that the chloroform when thus locally applied had occasionally a decided emmenagogue effect. But whether this drug, or any of the many new stimulants in modern pharmacy that could thus be applied locally to the vagina and cervix uteri would really act as local emmenagogues is a question that only experience can decide, and probably that decision will be adverse. Let me here, when I am speaking of the medicated pessaries of the ancients, further observe that they fancied that they possessed medicated pessaries which could fulfil more remarkable indications than even the restoration of the catamenial secretion. We know, from only too numerous sources, that criminal abortion was extensively practised in the ancient Pagan world. Various Greek and Roman authors speak of medicated stimulating pessaries, which, when introduced into the vagina, were supposed to be capable of exciting expulsive uterine action in the pregnant uterus. Already upwards of 2000 years ago this oxytoxic action of medicated pessaries was believed to be so certain that Hippocrates made his disciples swear that they would not employ these pessaries for the production of abortion. No drug is known in modern times to have the property when applied to the vagina of arousing the uterus into parturient action. But if any such drug were discovered it would, I believe, be applied by the Profession of the present day to its only legitimate purpose, of inducing premature labour in those cases and circumstances in which that induction is now had recourse to. But let us pass on to the consideration of

2. Local Emmenagogues Applied to the Uterus.

The surface of the cervix uteri has been occasionally made the seat of local stimulating applications for the restoration of the catamenial secretion. The lining membrane of the uterus, and the cavity of the organ have latterly been more frequently used for this purpose.

Nitrate of Silver to the Cervix Uteri, applied in substance or in a strong solution, so as to blister, is occasionally used with some degree of success by our French Medical brethren for the cure of amenorrhœa. Lubanski and Egan have published cases of its successful employment. But

Direct Stimulants applied to the Uterus or Uterine Cavity itself are undoubtedly the most certain means at our command for recalling its suspended menstrual function. The irritant may be nitrate of silver, or cantharides, or iodine. They may be applied to the lining membrane of the uterine cavity by means of such an instrument as that I now show you. This is simply a Lallemand's porte-caustique of sufficient length to pass readily into the interior of the uterus,—curved so as to adapt it to the uterine inclination,—and furnished with a knob, like that on the uterine sound, at two and a-half inches from the point, to enable you to know when the instrument has reached the fundus. Charged with some powdered nitrate of silver, or cantharidine powder or ointment, it is introduced, about the period when a menstrual discharge might be expected, into the interior of the uterus, and the stylet being then pushed forward, and subsequently rotated twice or thrice, the irritant is thus sprinkled over the mucous membrane, or dissolved out so as to come in contact with it. I have often known this form of irritant application produce menstruation in a few hours; and excite the womb in obstinate cases, when repeated at monthly intervals, to the healthy performance of its normal functions, and so put an end to a long train of distressing symptoms.

Dry Cupping the Interior of the Uterus.—Some years ago I became strongly impressed with the idea that if we had any means of, as it were, dry-cupping the interior of the uterus, so as to draw the blood in larger quantity to the surface of its lining membrane, we might, perhaps, succeed frequently, in some varieties of amenorrhœa, in exciting the uterus to the resumption of its functions, and effect a temporary relief in the condition of our patient similar to that produced by

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leeches applied to the cervix uteri and elsewhere, but superior to it in being a more perfect imitation of Nature's mode

Fig. 1.

Fig. 2.

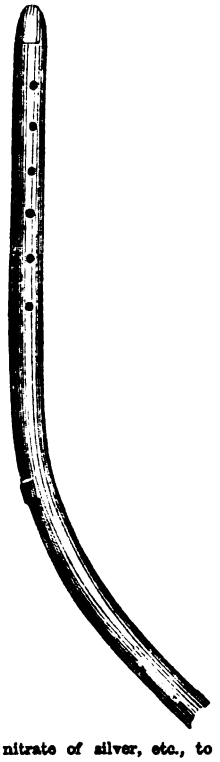

Fig. 1.—Porte-caustique for applying nitrate of silver, etc., to the interior of the uterus.
Fig. 2.—Instrument for dry-cupping the interior of the uterus.

of relief, and not likely to be attended with so much general deterioration of the system. With this view, I have made frequent use of a tube resembling in length and size a male catheter, with a large number of thickly set small orifices stretching along for about two inches from its extremity, and having an exhausting syringe adapted to its outer or lower extremity, by which the air could be withdrawn after it had been introduced into the cavity of the uterus. The use of this instrument is in some cases attended with striking results. It usually happens that after a few strokes of the piston of the syringe, and the retention of the instrument for two or three minutes in utero, a small quantity of blood is found in the tube of the instrument after its withdrawal. For it does not exactly operate as a mere dry-cupping apparatus congesting the lining membrane of the uterus. More generally the exhaustion of the syringe draws the mucous membrane of the uterus so much through the numerous small orifices which perforate its uterine extremity, that these congested and constringed points yield a little blood. I have known the menstrual secretion to follow immediately upon the use of this means in cases of amenorrhœa that had been of long standing. But more generally it requires to be employed several days successively, or successively for a few days at two or three menstrual periods, before this happy result is obtained. And occasionally it will, like all other emmenagogue means, fail entirely. In fact, in the process of normal menstruation, other normal conditions obtain, besides a congested and active state of the vessels of the secreting mucous membrane of the uterus itself. The observations of Drs. Power, Lee, Girdwood, and others show that menstruation is ...t upon changes in the ovaries or ovarian vesicles, as well as upon changes in the uterus. Sometimes the changes in the ovaries may possibly be present without the induction of the corresponding secretory action in the mucous membrane of the uterus. In such instances, in particular, the local means—nitrate of silver and dry cupping—that I have hitherto spoken of, may perhaps be chiefly of use. But probably in those cases where the ovaries require to be stimulated as well as the uterus, we have a more likely means of accomplishing this double purpose in the means I have next to mention, than in those I have hitherto adverted to. I allude to the introduction and wearing of a small and usually galvanic intra-uterine pessary as a general stimulant to these organs. In one of the first cases in which I successfully tried this means—now many years ago—the patient, after menstruation commenced, was, in consequence of great exposure and cold, attacked with acute double pneumonia, which rapidly proved fatal. On the post-mortem examination of her body, along with Dr. Robert Hamilton, who had attended her in her illness, we found the menstruation, which had been established for the first time for many months, accompanied with the usual congested and hypertrophied appearances in the lining membrane of the uterus, and with the apoplectic rupture and destruction of a Graafian vesicle in one of the ovaries.

Intra-uterine Pessaries.—This form of instrument consists simply, as you perceive, of a small copper bulb (see Fig. 3,

Fig. 3.

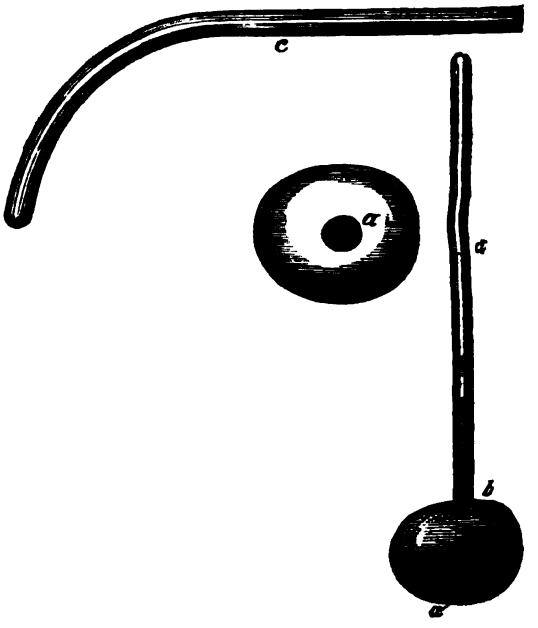

Fig. 3.—Full-sized sketch of the galvanic intra-uterine pessary, *a b d*, and of the staff, *c*, used for introducing it. *a*. Perforation on the lower surface of the bulb, *a b*, of the pessary, into which the point of the staff is made to fit; *b d*, stem, or intra-uterine portion of the instrument, consisting in the lower half, from *b* to *d*, of copper, and towards the point of zinc.

a, *b*), from the middle of which there rises a stem, *d*, made half of copper and half of zinc, and measuring 2½ inches in length, or rather less than the length of the uterine cavity. In introducing it, the patient is placed as usual on her left side, and the forefinger of the right hand having been brought into contact with the os uteri, the instrument is guided along it either with the right thumb or with the fingers of the left hand until the point of it passes through the orifice into the canal of the cervix. Usually you will experience no great difficulty in passing the instrument in this way up as far as the os internum; and if you now remove the point of the forefinger from the os and apply it below the bulb of the instrument so as to press it gently upwards, you will sometimes succeed, with the greatest ease, in insinuating it entirely into the uterine cavity, till the upper surface of the bulb is felt to be in apposition with the lips of the cervix. In other cases, however, you

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will meet at this stage with some degree of difficulty, for the os internum is occasionally the site of a kind of stricture, and this state of matters is further not unfrequently complicated by a slight anteflexion of the whole organ at the union of the body and cervix, so that the point of the pessary is apt to be caught at this level, and its complete entrance into the uterine cavity obstructed. In such cases you will best effect your object by pressing the bulb of the bougie very much towards the hollow of the sacrum, so as to tilt forwards the point of it, and to make it move slightly from side to side, or from before backwards, when you will feel it suddenly passing the constricted spot, and the uterus settling down, as it were, on the instrument, without the exertion on your part of any active or injurious amount of upward pressure. I have spoken of the introduction of the intra-uterine stem-pessary as being effected by the unaided action of fingers, because, for a long time past, I have never had recourse to any other means. But, as you may observe, there is, on the surface of the bulb opposed to that from which the stem springs, a small orifice, *a*, intended to admit the point of a staff, *c*, which may be used to facilitate the introduction of the pessary. The staff is made of steel, is about eight inches in length, and is slightly bent at the point, so that when it is fitted into the hole in the bulb of the bougie, the latter can be guided by means of it in any direction, with more precision and power. I fear, however, that no mere description I can give you as to the mode of passing the intra-uterine pessary will enable you in any case to effect its introduction. This is one of those little operations which you will only succeed in performing properly by a certain amount of practice; and I believe that after you have tried it a few times, so as to have gained a little tact and skill in the manipulation of the bougie, you will come to effect its introduction easily with the fingers alone, and discard altogether the use of the staff. There is one secret regarding the introduction of this instrument that I have to tell you. Sometimes you may have succeeded in passing the uterine sound easily enough, but are foiled in your effort to introduce the permanent pessary. In such a case you may save pain to your patient and trouble to yourself by re-introducing the sound, and leaving the patient lying with it in the uterus for half an hour or an hour, at the end of which time you will find it is so placed or so patulous as readily to admit the intra-uterine bougie. But you may ask, will the instrument thus introduced remain of itself *in situ*? In the majority of cases it will; and always with most certainty in those where the internal orifice has been so contracted or curved as to render the introduction of it somewhat difficult. In other cases its re-introduction is attended with no difficulty or discomfort, and you will find that after it has been worn for some days, the zinc half of the stem becomes covered with a white saline crust of greater or less thickness, which tends to enable it afterwards to keep its position. Though the zinc portion is generally deeply encrusted on the withdrawal of the instrument, the copper portion is always, on the contrary, clean and clear of all deposit. Before re-introducing it, remove the crust from the zinc portion, and wash it with vinegar. If you find it necessary you may sometimes introduce below the instrument, as I have not unfrequently done, a small gutta percha pessary, such as we use in the treatment of prolapsus uteri, which will support the intra-uterine pessary and prevent it from slipping out. I never saw the use of this instrument for the cure of amenorrhœa attended with any untoward result, and I and my assistants have employed it in a very great number of cases. Often we see its introduction immediately followed by the most marked results, especially with regard to the cure of the headaches and other secondary symptoms; and if worn for a sufficient length of time, it does not often fail in exciting the uterus to the performance of its functions, or in recalling them when they have become suspended. I have seen menstruation speedily recalled by it after almost shop-loads of physic had been used in vain for the purpose. It produces its effect, I believe, simply by the gentle and continued stimulation of the whole uterine system. Probably other kinds of foreign body lodged there would produce much the same effect; and I have treated cases of amenorrhœa with success by the introduction of a stem pessary made entirely of copper or of German silver, such as is used for dilating the cervical canal in cases of dysmenorrhœa. But in cases of simple amenorrhœa I prefer to have the instrument made of two different metals, as suggested by Dr. Weir, because the slow galvanic action resulting from the chemical changes effected in the zinc increases the chances of a speedy and successful issue. For, let me remark, finally, there is yet one other means which has been often much relied on and bepraised as eminently serviceable for the cure of amenorrhœa, viz., the application to the uterus of

Electricity and Galvanism.—Among their multifarious Medical applications, galvanism and electricity have been from time to time employed in the treatment of various uterine disorders; and, in the latest American work on their use in Medicine, by Dr. Garratt, of Boston, I find the author speaking of them as almost the only certain means of exciting the action of the uterus in cases of amenorrhœa. To apply them to this organ you need to be provided with special forms of conductors. I believe that the slow but long-continued action of the intra-uterine galvanic pessary will produce the effect with far more certainty, than the repeated application of a stronger current; and I am sure that when you have found how easy it is, after a little practice, to introduce the instrument, and when you have witnessed in a few cases the safety and success that attend its employment, you will become more and more inclined to treat those very obstinate cases of amenorrhœa by means of the galvanic bougie rather than by any more irksome or prolonged plan of treatment. The galvanic pessary, however, is a measure which you would not be justified in ever employing in young and unmarried patients, except the great obstinacy of the case, the severity of the sympathetic or secondary effects, or the danger to the patient's health and life, gave you adequate warrant for such interference. In the less claimant cases of amenorrhœa we would rejoice to find any external mode of applying electricity effectual as an emmagogue, whether the electricity were derived from induction, as when the so-called "Faradaic currents" are used; or from chemical decomposition, as in the various forms of galvanic battery; or from friction, as when electric sparks and discharges from the Leyden jar are employed. Of the effects of Faradization in amenorrhœa I know little practically.. But I have seen the galvanic current employed some fifteen or twenty years ago often, and certainly, on the whole, with little or no emmenagogue effect. About a quarter of a century ago electric sparks directed through the uterine region were tried in many cases of amenorrhœa by my predecessor, Dr. Hamilton, and my friend Dr. Ziegler, who is most thoroughly acquainted with Medical electricity and its applications in practice. I have Dr. Ziegler's high authority for stating that, after making many trials of it in amenorrhœa the impression left on his mind is that, as an emmenagogue it is in the main quite ineffectual and useless. It is but right however, to add that some observers, as Dr. Golding Bird have arrived at a different and far more favourable conclusion; but I am inclined to place great reliance upon the results of Dr Ziegler's experience on this subject.

Amenorrhœa Connected with an Undersized Uterus.

I have hitherto neglected to speak of the special treatment of the kind of case that gave rise to these observations, viz., an amenorrhœa with an undersized uterus. Now, in atrophy of the uterus, whether from imperfect original development of the organ at puberty, or from superinvolution during the puerperal state, the chief hope that we can, I think, ever entertain of the cure of the amenorrhœa, consists in the use of the intra-uterine or galvanic pessary. For it is only by this means that we can expect to remove the undeveloped organic state of the uterus upon which the amenhorrœa depends. To understand its mode of action in these cases, let me here state to you that in uterine therapeutics, as in uterine pathology and physiology, there prevails the great general law, that all continuous and increasing irritations and expansions of the uterine cavity or uterine walls from foreign bodies, leads to increased growth and hypertrophy in the walls of the organ. This is true whether the foreign body be an ovum, as in uterine physiology, or a polypus or fibroid tumour as in uterine pathology, or a series of gradually enlarged intra-uterine pessaries, as in this instance of uterine therapeutics. But a mere acute temporary expansion of the uterus or uterine walls is not sufficient to lead to their development or hypertrophy. Hence, for example, the temporary use of a sponge tent or tents in the cavity of the uterus for one or two days will not suffice. The irritation, if I may so speak, must be much more chronic and prolonged in its action. Where the uterus is very undersised, as ascer-

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tained by the uterine sound, where it is not above an inch or an inch and a quarter in length, all treatment will, I believe, probably prove useless. But where the atrophy or diminution is not so great, and the organ not, perhaps, a few lines less in length than the normal uterus, you have a good chance of relieving or curing your patient, by making her wear a series of small galvanic pessaries, of greater and greater length and thickness. I have now repeatedly seen menstruation both temporarily and permanently restored by this simple means. The history of the first successful case of this kind which I met, will probably illustrate the practice better than any long detail. The history of the case of amenorrhœa to which I refer impressed itself upon my memory by its peculiar obstinacy, by the variety of measures that were employed for its cure, and by the complete success which finally attended the use of a means of which I shall presently speak, after the patient had nearly reached her thirtieth year. The patient, who was the sister of a Doctor, and had been under the care of various Medical men at different times, had from puberty suffered from amenorrhœa and its attendant evils, more especially from asthma, recurring every month and lasting for several days and interfering sadly with her health and happiness. She had never once menstruated regularly, the uterus being slightly undersized. She had taken quantities of medicine of every possible kind, had been repeatedly leeched, and had been subjected to many different local applications, sometimes with some little relief to her symptoms, but never with any result at all approaching to a cure. Believing that in such a case all hope of radical relief was vain, except through measures directed towards the uterus itself, I persevered for a time in the application of nitrate of silver to the lining membrane of its cavity, in the manner I have described to you; and the operation was always attended with more complete and lasting relief than the patient had ever before experienced. This treatment was for several months persevered in; but, both she and I having become tired at last of imperfect and transient results, I had recourse to the introduction of a small metallic pessary into the uterine cavity. In the case of the lady of whom I now speak, the introduction of this instrument was followed by the speedy relief of all her more urgent symptoms, and particularly of her monthly fit of asthma, and after she had worn it for some weeks she was equally astonished and delighted to find at the recurrence of her next period, a free menstrual discharge, instead of the dreaded apnœa with which she had been so long afflicted. She continued to wear it for ten or twelve months until her health became so far restored that she was able to go to a ball,—a kind of amusement in which she had never before been qualified to indulge. When the discharge appeared to have become fairly established, the instrument was at last removed; and for some months the patient continued to menstruate regularly and to enjoy good general health. On the recurrence of cold weather, however, the uterus again failed to perform its function, and instead of having the proper menstrual discharge, she was attacked with one of her old fits of asthma. At her own suggestion and urgent solicitation I again introduced the galvanic pessary; and she wore it for about three years altogether, without ever experiencing from it any kind of inconvenience. The uterus during that time performed its functions painlessly and regularly; the secondary symptoms were all kept in abeyance; and it was only at length finally removed when the uterus was found to be equal to the performance of its functions without the presence of any irritant in its interior. The same good effects which were here produced I have seen resulting from the use of the intra-uterine bougie or pessary in various similar cases.

PHLEBITIS AND PURULENT INFECTION WITHOUT EXTERNAL WOUND.—M. Chassaignac states that he has demonstrated by many cases, and especially by examples of simple fracture, that phlebitis and purulent infection may supervene on mere contusions and on fractures unaccompanied by suppuration communicating externally. These facts are of great importance, as they explain the occurrence of certain cases of purulent infection which have been believed to be unconnected with external violence, and which have still arisen from some contusion which was either unperceived or had been forgotten.—*Moniteur des Sciences Méd.*, No. 37.

ORIGINAL COMMUNICATIONS.

STATISTICS OF

OPERATIONS FOR STRANGULATED HERNIA AT ST. GEORGE'S HOSPITAL, DURING SEVEN YEARS.

By G. F. COOPER and T. HOLMES,
Formerly Surgical Registrars to the Hospital.

THE total number of cases of hernia operated on during the same period as was comprised in our tables of Amputation and of Compound Fracture, was 121, and the total number of deaths 37, or 30·5 per cent.; of these cases, 33 were of the Inguinal, 85 of the Femoral, and 3 of the Umbilical variety.

INGUINAL.—Total, 33. Common oblique, 19; congenital, 10; infantile, 1; direct, 3. Of these, 22 were on the right, and 11 on the left, side; 9 died, or 27·7 per cent.

Of the 19 cases of common oblique hernia, 2 were females, and the rest males; 4 died, or 21·05 per cent., of which deaths 1 was the result of bronchitis; 14 were on the right side, and 5 on the left.

Of the 10 congenital cases (all males), 7 were on the right side and 3 on the left; 4 died, or 40 per cent., 1 probably as the direct result of injuries received during taxis (a). 3 were infants, 3 months, 7 months, and 14 months old respectively; of these two died. 1 aged 14, where the hernia had existed since birth, died. The following recovered:—1 aged 24, where the hernia had existed since the age of 9 years. 1 aged 33, where the hernia had existed as long as he could remember. 1 aged 33, where the hernia had existed since the age of 6 years. 1 aged 54; of this case there was no history. 1 aged 58, where the hernia had existed 4 years only. Finally, the oldest patient in this class died after operation. He was 60 years of age. The hernia seems to have existed congenitally, and had been operated upon 15 years previously.

It thus appears that in most of these cases the hernia was either known to be congenital, or to have existed for so long a period that it might fairly be assumed to be so.

Of the three cases of direct hernia, there were 2 males and 1 female: 2 were on the left side, and 1 on the right; 1 died, or 33·3 per cent.

In the case of infantile hernia, the patient was 32 years of age; the hernia had been known to exist for 20 years; it was on the left side. The patient recovered.

Ages of Patients with Strangulated Inguinal Hernia.—The age of the patients with congenital hernia is stated above. Of the 23 instances of the other forms of inguinal hernia, one was an infant 11 weeks old (died of bronchitis), and another 4 years. The youngest age of the remaining 21 cases was 15 years, and the oldest 70. The occurrence of strangulation at the middle period of life is shown by the following statement of the ages of these 21 patients:—

From childhood to 30 years (inclusive)			4
From 30 to 40	,,	,,	5—1 died
From 40 to 50	,,	,,	6
From 50 to 60	,,	,,	4—3 died
From 60 to 70	,,	,,	2

As to the length of time that this form of hernia had existed before the occurrence of strangulation little need be said beyond this, that in 2 cases only was the hernia quite recent. It seems useless to tabulate the "average duration" of the hernia previous to strangulation, since the latter depends so much on accidental circumstances.

Period of Strangulation.—Under this head the list of inguinal hernia gives a very favourable return, since the great majority were operated on within 24 hours of strangulation.

1st day of strangulation	19 ..	3 died—All of peritonitis. In 1 it had commenced before the operation, as testified by the state of the gut at that time; 1 of the others was an infant.

(a) No doubt the principal, if not the sole, reason for the greater mortality in this class of cases, is the large number of infants contained in it.

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2nd	,,	,,	5	..	2 died—1 (an infant) of exhaustion, existing before the operation; and the other from the result of phagedæna around an artificial anus.
3rd	,,	,,	5	..	3 died—In all the gut was irretrievably damaged: in 1 case by ulceration, and in the other 2 by forcible taxis, applied before admission.
4th and 5th	,,		4	..	1 died—Of bronchitis (an infant).

These figures clearly show how successful the operation for inguinal hernia may be expected to be in the adult, if the case be operated upon before the occurrence of peritonitis; since, excluding from the above list the infants, the fatal case in which peritonitis had set in before the operation, and the 3 cases in which injury had been inflicted on the gut by the negligence or violence of the Medical attendant, we have 26 cases and only 2 deaths; and as one of these was a very unusual and exceptional instance of sloughing around an artificial anus, it would perhaps be more correct to say that out of 25 ordinary cases, in which the operation was performed early, only 1 died, and in this case the stricture was unusually tight and the operation difficult from some folding or invagination at the neck of the sac.

Trusses Worn or Not.—It has been already stated that it is very rare for inguinal hernia to become speedily strangulated. Hence it is probable that if a well-fitting truss were applied soon after the first appearance of the tumour, few cases would ever require operation. In the only two in which the hernia was recent, no truss had been worn. Of the whole 33 cases, in 12 no truss had ever been worn; 2 had originally used trusses, but the instrument had soon become broken and had not been replaced; 4 others had exposed themselves to still further risk by wearing badly-fitting trusses; and in the other 15 cases a truss had been worn, but in many it was known not to have been adopted till long after the first occurrence of the hernia, and this was the case, doubtless, in several others, in whom, in consequence of the lapse of time, the circumstance had escaped their recollection.

Contents of the Sac and their Condition (b).—In one case the sac was not opened. The sac in almost all cases contained serous fluid, varying in quantity, as well as in the proportion of blood mixed with it. The latter seemed due, at any rate sometimes, to violence in the employment of taxis.

The visceral contents of the 32 herniæ may be thus classified:—

Healthy or only congested small intestine	14	2 deaths.
Inflamed small intestine	6	3 ,,
Healthy small intestine with omentum.	9	2 ,,
Inflamed large intestine	1	1 ,,
Both large and small intestine with omentum	2	1 ,,
	32	9 deaths, or 28·1 p.c.

In many of the cases of entero-epiplocele, the omentum was adherent, thickened, or showed some trace of morbid action; in most of these it was excised, but as this fact does not seem to have affected the progress of the case, it will not be worth while to dwell particularly on the state of the omentum. In none of the cases of entero-epiplocele was the gut visibly inflamed, nor was the mortality much greater than in simple enterocele, and in one of the fatal cases, excessive taxis had been employed. In no instance was the gut found ulcerated in the line of stricture.

The three cases in which the large intestine was contained in the sac were all on the right side. This small number, and the exceptional character of the cases, prevent any comparison between herniæ containing large and those containing small intestine in respect of mortality, etc. In one of the fatal cases, the appendix cæci was so riddled by ulceration, that it was thought right to tie and cut it off; the other was an instance rather of incarcerated and inflamed than of strangulated intestine. In this case, the inflammation, being unrelieved by the division of the tissues investing the gut, terminated in artificial anus: the patient's general health had been re-established, when he was attacked by phagedæna (at that time epidemic) and sank exhausted by the sloughing, which had largely opened the gut.

Causes of Death.—From what has gone before, it will be understood that the causes of death were in most cases entirely independent of the operation: in one, the patient (an infant) died of bronchitis, which was rather a cause than an effect of the hernia; in a second, from the direct result of forcible taxis, by which both the hernial sac and the gut, which it contained, had been ruptured; in a third, from the effects of ulceration and perforation of the appendix cæci anterior to the operation; in a fourth from sloughing around an artificial anus, long after convalescence from the operation; in a fifth (an infant) from exhaustion, existing before the operation, the strangulation having lasted thirty-six hours; and in the four remaining cases, of peritonitis. In one of these, the gut at the operation was found coated with lymph, and the serum mixed with lymph in the sac testified to the existence of peritonitis previously. In one (an infant) the same fact was proved by the escape of serum from the abdominal cavity at the operation; and in another, the peritonitis was, probably (to say the least of it), the result of forcible taxis rather than of the hernia or the operation. The general conclusions from these facts is that inguinal hernia is little liable to strangulation (c), especially if early treated by a well-fitting truss; and that, when strangulated, should the taxis fail, it may be relieved by operation with every prospect of success, provided the patient be in good health and the operation be performed early.

Umbilical.—The three cases of umbilical hernia do not require much comment. All were females and past the middle period of life. The sac in all contained a good deal of omentum, which latter, in one instance, formed the stricture. The fatal case was an exploratory operation, in which no strangulation was recognised at the time of the operation; but the patient died of previous peritonitis.

Femoral.—This form is much more frequently strangulated than the inguinal variety. Our table contains 85 of the former to 33 of the latter. Of these 85 cases, 14 were males, and 71 females; 46 occurred in the right side, and 37 on left; in 2 this point is not mentioned. The deaths were 27 or 31·76 per cent.

Age.—One case occurred in a female child, aged 8 (a very rare occurrence); otherwise, all were above 20 years of age. The rest may be thus arranged:—

From 20 to 30 inclusive,	4 cases,	1 died.	
From 30 to 40	,,	20	,, 3 ,,
From 40 to 50	,,	21	,, 4 ,,
From 50 to 60	,,	20	,, 7 ,,
From 60 to 80	,,	19	,, 12 ,,

Thus strangulation appears to be very rarely met with below the age of 20; but after this period we find that the cases occurring in each decade are almost exactly equal, reckoning the 20 years, from 60 to 80, as equivalent to one decade. The operation late in life seems far more fatal than in middle age; but many more powerful causes, of course, tend to produce this excess in mortality.

Duration.—In 20 cases the hernia was quite recent; so that in almost a quarter of the total number, strangulation commenced very soon, and frequently (as far as the patients knew) immediately after the first appearance of the tumour. It is the liability to early strangulation that gives its chief danger to femoral hernia. In this respect, it presents a striking contrast to the inguinal variety, in which this occurrence was noticed only twice out of 33 cases. The period of existence of the hernia in older cases was very variable. In 29 it varied from a few weeks to 3 years; in 1 it was uncertain, and in the remaining 35 was more than 4 years; 27 years was the highest period recorded.

Period of Strangulation.—This was generally longer than in inguinal hernia, the reason being probably twofold; viz.,

(b) It was our intention to have included in this part of the subject some observations on the significance of the quantity and nature of the fluid so generally found in the sac. But it was found on examination of the tables, from which these statistics are compiled, that the data which they contained were hardly sufficient for statistical accuracy, since this point is frequently passed over in them. In fact, from the rapidity with which the fluid escapes when the sac is opened, it is not always easy to be sure of its real condition. The evidence before us, however, quite justifies us in endorsing Mr. James's conclusions on this matter, for which we would refer our readers to his "Practical Observations on the Operations for Strangulated Hernia," p. 23.

(c) In estimating the rarity of the accident of strangulation in inguinal hernia, it must not be forgotten that this form is more than seven times as common as femoral hernia; while, if our table gives a correct average, its strangulation is hardly more than one-third as common. Mr. Bryant, quoting the statistics of the London Truss Society, says that out of 84,473 cases of inguinal and femoral hernia, 75,054 belonged to the former, and 9424 to the latter division. We gladly take this opportunity of referring to Mr. Bryant's valuable paper in Guy's Hospital Reports, Third Series, vol. ii.

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first that most of the patients in this class are women, and, therefore, less likely to apply for early advice on account of the position of the tumour; and, secondly, that the tumour itself is as a rule smaller, and consequently more easily overlooked.

1st day of strangulation	10 cases	1 death	—from acute peritonitis.	
2nd ,, ,,	20 ,,	5 deaths	—In 1 case from cholera; in 1 from internal strangulation; in 1 from old bronchitis, with symptoms of peritonitis; in 1 from peritonitis coming on before operation; in 1 from sloughing of gut.	
rd ,, ,,	23 ,,	6 deaths	—In 1 case from bronchitis; in 2 from gangrene of the gut; in 2 from ulceration and perforation at or soon after the operation, and in 1 from slow ulceration and perforation of the gut some weeks after operation.	
4th ,, ,,	11 ,,	4 deaths	—1 from exhaustion, consequent on collapse; 2 from peritonitis; 1 from ulceretion of the gut.	
5th ,, ,,	9 ,,	3 deaths	—1 from peritonitis; 1 from gangrene of the gut; 1 from secondary hæmorrhage, from some undiscoverable vessel or vessels.	
6th ,, ,,	4 ,,	2 deaths	—1 from peritonitis (kidneys diseased); 1 from ulceration of the intestine.	
Beyond this, on various days, up to the 10th.	6 ,,	4 deaths	—2 from exhaustion and peritonitis; 1 from gangrene; and 1 from ulceration of the intestine.	

Besides these, there were two exploratory operations, in which the patients having old hernia, were dying from constipation and peritonitis; in one of these, the sac was found empty, and in the other the gut was not strangulated. Both died. Thus it appears that the same truth which is so forcibly attested by the statistics of inguinal, applies, though not quite so evidently, to femoral herniæ: viz., that the operation is not a very formidable one, if only the disease be taken in time. Thus of the 30 cases operated on during the first 2 days of the disease, only 4 died from causes connected with the hernia; so if the remaining 2 fatal cases be excluded, one being from epidemic cholera contracted after the operation, and the other from an accidental attack of internal strangulation, when he was nearly convalescent, we shall have a mortality of 1 in 7. Even of the 4 fatal cases the patients were debilitated by previous diseases in 2 instances, and in 1 of the others an unusual and probably excessive taxis had been employed against a very tight stricture. Excluding such cases as these, we may say that an operation for femoral hernia in a previously healthy patient, performed at an early period of the disease, and not preceded by forcible attempts to reduce the gut, will almost always prove successful.

Truss.—In the great majority of cases the occurrence of strangulation was directly traceable to the neglect, on the part of the patient, to wear a well-fitting truss. Thus, of the 85 cases, 20 only had worn a truss, and in 2 of these it was known to have been used but occasionally; 1 had only adopted it lately. The others (except 1 in whom the particular was not noted) either wore no truss, and in this number all the "recent herniæ" are included, or what is still worse, a badly-fitting one.

Contents of the Sac and their Condition.—In 3 of the cases the sac was not opened, and in 1 it was empty. Of the remaining 81 the sac contained:—

Omentum only in	5 cases	—All recovered.
Healthy or congested small intestine	21 ,,	3 deaths.
Small intestine with effused blood	4 ,,	1 death, from internal strangulation.
Inflamed small intestine	15 ,,	4 deaths.
Ulcerated, perforated, or gangrenous intestine	8 ,,	5 deaths.
Small intestine, with omentum—		
Both healthy	2 ,,	Both recovered.
Intestine inflamed	5 ,,	3 deaths, 1 from cholera.
Omentum sloughy or consolidated	9 ,,	3 deaths.
Intestine perforated or gangrenous	3 ,,	3 deaths.
Omentum adherent	4 ,,	2 deaths.
Omental sac	4 ,,	2 deaths, 1 from bronchitis.
Large intestine	1 ,,	Recovered.
	81	26 deaths, or 32·1 per cent.

Causes of Death.—The 27 deaths from femoral hernia may be thus arranged:—

Other diseases	3	—viz., cholera, internal strangulation and bronchitis.
Exploratory operations	2	
Hæmorrhage after the operation	1	—Probably from a number of small vessels.
Pure and simple peritonitis	6	—In 2 cases it was known to exist before the operation; 2 of the other patients were debilitated by old disease, viz., bronchitis and Bright's disease respectively.
Exhaustion from protracted strangulation	2	—Strangulation of 7 and 8 days respectively; the patients sank, one in half-an-hour; the other, in one hour and a-half.
Ulceration of the gut in the course of the stricture at the time of operation	5	
Ulceration of the same kind subsequent to the operation	2	
Gangrene of the intestine at the time of operation	2	
Gangrene subsequent to the operation	4	

These facts tend to show that the mortality in femoral hernia is due almost entirely to the negligence of the patients, and, we regret to have to add, to the ignorance and apathy or to the folly of their Medical attendants. At St. George's Hospital, the rule is, and has been for a long period, to operate very early; and in femoral hernia, either not to attempt taxis at all (should the stricture be very tight) until the patient has been put under chloroform in readiness for the operation, if necessary; or, at any rate, to confine the taxis to the most moderate efforts. Were patients generally aware of the great danger of delay after the occurrence of symptoms of strangulation, and were their Medical attendants to act as though they were convinced of the risk of injury which the gut runs by prolonged detention in the hernial sac, and more particularly by the rough handling it is too often subjected to, the mortality after herniotomy would be reduced to a very low figure. Unfortunately, we still frequently see cases sent to an Hospital after many days' strangulation, in which Medical men have made daily and often prolonged attempts at reduction. The general rule in strangulated hernia, especially of the femoral variety, ought to be,—operate at once, after the first failure of the ordinary methods for reduction. To this rule, of course, exceptions must often be made, as in inguinal herniæ, where the symptoms are slight; but in the femoral, and where the stricture feels very tight, or in any class where the vomiting is urgent or the symptoms of peritonitis clearly marked, it should be made absolute.

Sac opened or not.—With respect to our tables alone we can draw no conclusions, by comparing the cases where the sac was opened with those when it was left intact; since with us it was opened in every case save four, and those, of course, were of the most simple character. But in the *Lancet* of 1856 there is a paper by Mr. Nathaniel Ward, in which he gives 100 cases from the London Hospital, where the rule is, *cæteris paribus*, not to open the sac; and as some deductions may be arrived at by comparing his table with ours, we have thought it advisable to make a similar classification of our cases and place them together, thus:—

London Hospital.

No. of Cases.	Nature of Hernia.		Sac opened.		Sac not opened.		Deaths.	
100	Umbilical	4	4		—		3	33 per cent.
	Femoral	63	21		42		19	
	Inguinal	33	24		10		11	

St. George's Hospital.

121	Umbilical	3	3		—		1	30·5 per cent.
	Femoral	85	82		3		27	
	Inguinal	33	32		1		9	

This comparison shows that the incision into the sac had no effect on the mortality; and if this be the case, surely every Surgeon would prefer to have the opportunity of examining the contents of the hernia, for the information to be thus obtained is so important that it would even be worth a slight risk, were any risk connected with the opening of the sac; but the tables above, as far as they go, prove otherwise, and that the incision in the peritoneal sac is a matter of no consequence in respect of mortality.

As to the time during which the treatment lasted in the favourable cases, we have the following data:—24 cases of inguinal hernia recovered; the total number of days of

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their stay in Hospital was 877, giving an average of 36 days: —58 cases of femoral hernia recovered; in 55 of these cases the sac was opened; the period of recovery is not noted in two of the cases; the total period of the remaining 53 was 1821 days, an average of 34 days.

In the three simple cases of femoral hernia where the sac was not opened, the periods of recovery were 13, 17, and 40 days respectively.

These figures would appear to show a slight advantage in the rapidity of cure on the side of the operation without opening the sac, but they are obviously too small in respect to the latter to afford a foundation for any conclusion. We may observe that the two rapid cases of recovery without opening the sac are not the shortest in our table. Among the inguinal herniæ, one case recovered in 10 and another in 13 days. Among the femoral, one recovered in 7 days, the whole wound uniting by first intention; and several in 17, 18, or 19 days. In all these cases the sac was opened. It does not appear, therefore, that the incision into the sac retards the progress of cure.

On the question of opening a gangrenous intestine, or of leaving it alone, the slight evidence which is obtainable from so small a number of cases is much in favour of making the opening; since out of eight cases in which the intestine was found perforated or gangrenous, three recovered, and of these the gut was slit up at the operation in two instances. In one of these the artificial anus was nearly closed when the patient left the Hospital, and eventually became entirely obliterated; in the other, the patient survived for more than a year with the artificial anus open, when, from some accidental cause, the adhesions between the gut and the parietes of the abdomen gave way, and the intestine was protruded out and strangulated by the artificial anus. It was returned and re-attached to the opening, but the patient sank.

IMPEDED LABOUR FROM DORSAL DISPLACEMENT OF THE ARM.

By J. JARDINE MURRAY, F.R.C.S.E.
Honorary Surgeon to the Brighton and Hove Dispensary.

Some importance may be attached to the case which forms the subject of this communication, as the peculiar form of obstruction to parturition which occurred does not appear to have been recorded by any obstetrician except Professor Simpson of Edinburgh. It consists in one of the arms of the infant being displaced backwards across the neck or occipital region; or rather the forearm is thrown across the back of the head and neck, the arm being thrown upwards in a line with the body in order to admit of the malposition of

the forearm. In this abnormal position the displaced elbow and forearm of the child increase greatly the dimensions of the head, and form a projecting obstruction which hitches upon the brim of the pelvis and prevents the descent of the head (a).

Henrietta H., aged 28, had borne two living children at the full term and had one miscarriage at the fourth month. Her first labour occurred five years previously, when she was delivered of a large male child. After an interval of three years she was again confined in so easy and expeditious a manner that the Medical man did not arrive till after the birth of the child, which, in this case also, was a well developed male.

At twelve p.m., on March 24, 1859, when Dr. Eastlake was summoned to attend her, he found that she had already been in labour during several hours. Liquor amnii escaped, os uteri well dilated, external parts hot. Notwithstanding strong expulsive pains, the fœtal head made no advance, and as there was great prostration, Dr. Eastlake requested me to see her with him. I first saw the patient at five a.m. She was much exhausted and delirious, the skin dry, and the pulse weak and rapid. The maternal passages, though swollen, were perfectly relaxed and open, there were strong uterine contractions, the pelvic brim seemed of ample dimensions, and the fœtal head appeared by no means unusually large. It was a vertex presentation in the first position of Nægelè. During each pain the fœtal head was pressed down on the pelvic brim, but again receded on the discontinuance of uterine action. The cord was ascertained to be partially prolapsed and perfectly pulseless.

As there was evidently some unusual cause of obstruction, and as it was necessary for the safety of the mother that delivery should be accomplished without further delay, she was placed under the full influence of chloroform. On now passing the examining fingers upwards, I detected the right elbow lying behind the right ear of the child; and on still further pursuing the examination, found that the right forearm lay behind the occiput. After this diagnosis had been carefully and fully verified by Dr. Eastlake, I delivered by podalic turning. The child was a normally-developed female of average size. The mother made an excellent recovery.

Here, then, we had a case in which, without proper assistance, rupture of the uterus might have occurred, or in which the woman might have died undelivered. The delivery by turning was, as far as circumstances allowed, perfectly satisfactory. In a similar case, it seems highly improbable that the malposition of the arm could be rectified by the natural expulsive efforts. If, therefore, the cause of obstruction were detected early in labour, the accoucheur might possibly hesitate whether to attempt to improve the position of the arm, or to have recourse at once to delivery by turning. But the malposition of the arm which has been described, is not likely to be discovered till the apparently natural labour has been unexpectedly prolonged, for the diagnosis can hardly be satisfactorily made out till the patient has been subjected to the full influence of anæsthetics.

Dr. Eastlake, who took much interest in this case, and who has lately had opportunities of profiting by the extensive practice of the Dublin Rotunda Hospital, entertains a different view of the treatment to be pursued, as may be seen by reference to his remarks appended to this paper. But I cannot agree with him as to the propriety of attempting to deliver by forceps in this form of obstruction, unless the misplaced arm has previously been properly adjusted, for I should have little hope that extraction of the child could be effected by such means. Nor do I think that craniotomy is the preferable operation when the child is dead; for in cases like that above related, the head has not entered the pelvic brim, which is however of ample dimensions, and the maternal passages are well relaxed. In such circumstances I have not found that delivery by podalic turning, when performed under the influence of chloroform, is an operation of great difficulty or danger to the mother, even after the liquor amnii has escaped.

In the case recorded by Dr. Simpson, the patient had previously had nine easy and speedy labours. His case was also a vertex presentation, but the face was directed towards the left, and not as in the present instance towards the right sacro-iliac synchondrosis, and there was misplacement of the left and not of the right arm.

In all probability, this peculiar form of obstruction sometimes passes undetected. Drs. Simpson and Cumming allude to a case in which "there was no pelvic or other deformity on

(a) *Monthly Journal of Medical Science*, April, 1850.

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the part of the mother, no want of uterine contraction, and no disproportionate size of the head of the child, and yet in which the late Dr. Campbell and others entirely failed in extracting the detained infant by the forceps, and were at last obliged to open its head "(b). And it would not be difficult to cite analogous cases from the records of Obstetric Surgery. For instance, the following note appears in the last published record of the practice of the Dublin Lying-in Hospital:—"The first stage occupied about twelve hours. *The head never entered the brim, though the pains were powerful.* Chloroform was administered, and produced some rest which was much required. The fœtal heart was found to have become extinct soon after the effects of the chloroform were removed, and the head was lessened. The cranium was large and highly ossified, but *no evidence existed of narrowing of the inlet.*"(c)

Brighton.

Remarks on the Foregoing Case. By Henry E. Eastlake, M.D., M.R.C.S., late House-Surgeon to the Royal Maternity Hospital of Edinburgh.

This case cannot but be interesting to all who are engaged in practical obstetrics. I think this posterior displacement of the arm may justly be regarded as a variety of natural labour, in common with hand and head presentation. I quite agree with Mr. Murray in believing that the true nature of this peculiar impediment to the progress of labour may often escape the observation of accoucheurs. The diagnosis of such cases cannot, I think, be ever thoroughly established, unless, as in this case, the whole hand be introduced into the vagina, for it must be at the pelvic brim that the advance of the fœtal head is arrested. The point that becomes so interesting and so important practically is, how such cases should be treated. In the Rotunda Hospital in Dublin the forceps has been successfully applied in two similar instances within the last twelve months; and supposing the fœtal heart to be audible when the true nature of the presentation is ascertained, it seems the most rational practice, although it may perhaps be difficult to explain exactly the mode in which the arm becomes adapted to the maternal passages during the traction of the head. It must, however, be apparent that the life of the fœtus may be placed in great danger, owing to the second stage of labour being unduly prolonged, if we are ignorant of the cause of impediment; and again, the very nature of the displacement may tend to allow of the funis being prolapsed. If, then, from the pulseless state of the cord (should it be prolapsed), or from the cessation of the fœtal heart after its being distinctly audible, or, indeed, from any other source, we can positively diagnose the death of the fœtus, it becomes a matter of importance to determine upon the management of the case under such conditions. The operation of Turning cannot, I think, be regarded as the most judicious. First, because, in all probability, the liquor amnii would have long escaped, necessarily involving difficulty, and in some cases impossibility, of version; and secondly, because this operation, performed under such unfavourable circumstances, would, to say the least, be far more hazardous to the mother than either the use of the forceps, or the operation of Craniotomy.

The use of the forceps, again, does not seem to be altogether desirable, as the great merit it possesses in giving a chance of life to the infant would be here unavailing. Supposing, therefore, a case in which the infant was dead, I should, in that conviction, be inclined to follow the treatment generally adopted in the Dublin School, when fœtal life is extinct, viz., Craniotomy, which is there held to be an operation *per se*, far less dangerous to the mother than the use of forceps. This is the experience and teaching of Dr. M'Clintock, the present Master of the Rotunda Hospital, who has, I think, shown most satisfactorily that the operation is not attended with that amount of danger to the mother generally supposed, and that the great mortality in the statistics of such cases is not due to the operation in itself, but may be fairly attributed to the fact, that craniotomy is often adopted after other modes of treatment, themselves attended by danger, have failed in their object.

(b) *Ibid.*

(c) "Practical Midwifery; comprising an Account of 13,748 Deliveries which Occurred in the Dublin Lying-in Hospital during a Period of Seven Years commencing November, 1847." By Edward B. Sinclair, A.B., and George Johnston, M.D. Edin. London: 1858. P. 264.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

CONDUCTED BY

JONATHAN HUTCHINSON,

Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital,

AND BY

J. HUGHLINGS JACKSON, M.D.

STATISTICAL REPORT OF OPERATIONS PERFORMED DURING THE YEAR 1860.

The subjoined Report comprises the cases supplied by the following Provincial Hospitals:—

The Derby, Leeds, Leicester, Sussex County, Addenbrooke's (Cambridge), Nottingham, Chester, Cheltenham, West Norfolk and Lynn, Sheffield, Hull, York, Northampton, Cumberland, and Gloucester.

PUNCTURE OF THE BLADDER.

Case 1.—The Cheltenham General Hospital: Mr. Eves.—A boy, aged 15. Three weeks before admission he fell on a box, injuring the perinæum. When admitted he had complete retention of urine for some days, and, as no instrument could be passed more than an inch down the urethra, the bladder (on October 24) was punctured through the rectum, which relieved the urgent symptoms. As he was suffering from tubercular disease of the lungs, no further operation was done. He left the Hospital on January 25, the urine still passing by the rectum. *Case* 2.—The Leeds General Infirmary: Mr. Teale.—A man, aged 24, had been *the subject* of stricture of the urethra for two years. When admitted, retention of urine had existed for forty-eight hours. The usual treatment having failed to produce relief, the bladder was punctured through the rectum. The canula was withdrawn at the end of eighty-five hours, and the stricture treated by dilatation. Recovery. *Case* 3. — The Leeds General Infirmary: Mr. Teale.—*See* Case 5, Operations for Stricture.

FATTY TUMOURS.

Fatty tumours were excised in thirteen cases, and all the patients recovered. The following is a statement of the age and sex of the patients:—Female, 40, shoulder; Male, 60, thigh; F. 16, shoulder; M. 59, thigh; M. 54, shoulder and back; M. 36, side; M. 50, back of neck; F. 30, side; F. 30, shoulder; F. 38, shoulder; F. 32, chest; M. 58, shoulder; F. 30, arm; F. 27, head; M. 19, groin; M. 57, arm.

PARACENTESIS FOR OVARIAN DROPSY.

Case 1.—The Cheltenham General Hospital: Dr. Wright.—A woman, aged 53. On December 16 about three gallons of fluid were taken off. She left the Hospital on January 3, apparently quite well. *Case* 2.—The Leeds General Infirmary: Mr. Teale.—A woman, aged 32, had been the subject of ovarian dropsy for two years. The cyst was multilocular; paracentesis had been performed twelve months previously. Thirteen pints of fluid were drawn off, and a solution of two scruples of the tincture of iodine and a drachm of iodide of potassium in two ounces of water was injected. No bad symptoms followed, and when discharged there was no appearance of the cyst refilling.

OPERATIONS FOR TUMOUR OF THE UPPER JAW.

Case 1.—Addenbrooke's Hospital (Cambridge): Dr. Humphry.—A man, aged 24. Encephaloid tumour of the upper jaw. Dr. Humphry removed the upper jaw. He made an incision through the lip in the median line, and another from the angle of the mouth. Recovered. *Case* 2.—The Liverpool Royal Infirmary: Mr. Bickersteth.—A lad, aged 19. Malignant disease of the right upper jaw, of ten months' duration. The operation was followed by very considerable hæmorrhage. Erysipelas set in on the fourth day after the

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operation, and spread to the fauces. Death ensued on the fourth day. *Case* 3.—The Chester Infirmary: Mr. Essex Bowen.—A healthy married woman, aged 36, with four children. An irregular solid tumour of the right upper maxilla, projecting and well-defined at its posterior limit, between the first and second molar teeth, and encroaching unevenly upon the roof of the mouth. It has been of slow growth, painless, and of firm consistence. Its anterior limit was between the canine and first bicuspid teeth. The first bicuspid and first molar were extracted, and the soft parts having been dissected up from the bone, that portion of the maxilla giving attachment to the growth was completely removed by aid of bone-scissors. Chloroform was commenced with, but it was subsequently found impracticable to persist in its administration. The resulting hæmorrhage proved obstinate, and was only suppressed by resort to the actual cautery. She remains free from any sign of a recurrence of the tumour (March, 1861). The appearance of the tumour after removal, as well as its history, point to its being of a benign nature. *Case* 4.—The Chester Infirmary: Mr. Essex Bowen.—A boy, aged 6. Malignant tumour (epulis). Half-an-inch of the subjacent alveolar process was removed by the bone-nippers. Recovery. There has been no recurrence of the growth (March, 1861). *Case* 5.—The Chester Infirmary: Mr. Essex Bowen.—A woman, aged 25. After having suffered, three years ago, from what was described as a large cystic tumour of the left side of the lower maxilla, and which was cured by the extraction of a "row of tooth-stumps," she was now troubled with an enlargement in the upper maxilla of the same side, above the canine tooth, elastic to the touch. The tumour was freely incised, giving exit to a serous fluid, in which a quantity of cholesterine was suspended, and the cavity stuffed with lint. This led to a perfect cure, and all enlargement has disappeared from the cheek. Chloroform not given.

OPERATIONS FOR STRICTURE.

Case 1.—The Cheltenham General Infirmary: Mr. Eves.—A man, aged 50. Extravasation of urine. He had not passed water for several days. Incision was made. Next day a catheter was passed. The man did well. *Case* 2.—The Leeds General Infirmary: Mr. Teale.—A man, aged 43, was admitted in 1858 for infiltration of urine, the result of a lacerated wound in the perineum. He recovered so as to be able to pass his urine in a full stream, but no instrument could be passed into the bladder. On his present admission (1860) an abscess had formed in the perineum, which on being opened allowed urine to escape. After waiting a few weeks, Mr. Teale performed perineal section. A full-sized catheter was retained forty-eight hours, and after its withdrawal a metallic bougie was passed daily. At the end of a week, the canal having tightened to some extent, the catheter was again retained during forty-eight hours, and was again followed by the daily passing of a metallic instrument. When discharged the urethra was perfect. *Case* 3.—The West Norfolk and Lynn Hospital: Mr. Marsters Kendall.—C. E., aged 49. This patient, about nine years back, used frequently when micturating to pass small calculi, and upon one occasion one became impacted in the urethra, which was cut down upon and removed. On the wound healing he experienced great difficulty in passing his water, and a catheter was introduced, but unsuccessfully, not entering the bladder, and making a false passage. About this time he was admitted into the Hospital under Dr. Cotton, and having remained in for some time, and received some benefit, he was made an out-patient. At the death of Dr. Cotton he came under the care of Dr. Black, and was again admitted as an in-patient on the 18th of May. He was then suffering the most acute pain, and was much debilitated. An abscess had formed in the perineum, which had been opened the evening before by Mr. Kendall, whose case (at the death of Dr. Black, which occurred at this time) it became. At a consultation held on the 25th of May, it was agreed that Symes' operation for stricture should be performed, which was accordingly done on the day already stated. From the time of the operation he gradually sank. *Case* 4.—Addenbrooke's Hospital, Cambridge: Dr. Humphry.—W. S., a stout, rather bloated man, aged 41. States that eighteen months ago he was doubled up under a straw elevator, and much hurt, most at the upper part of back. Was immediatey completely paralysed both as regards motion and sensation in all parts below the middle of the chest. His water was drawn off and an instrument retained. After three weeks a gathering formed in the perineum, and burst or was opened, and considerable sloughing seems to have taken place, and the urine flowed involuntarily through the opening. After ten weeks he began to be able to move his knees, and gradually re-acquired the power of moving the limbs and of feeling in them. He can now walk with the aid of two sticks rather totteringly, and with a somewhat jerky movement of each limb forwards, but there is no dropping of the toes, and he can feel well except just in the middle of right instep, where there is still numbness. The scrotum is divided in two, as in an hermaphrodite, and the tissues in the middle line are deficient, so that the mucous membrane of the upper wall of the urethra is exposed for two inches. It has a rather coarse, granular appearance, and the orifices of mucous glands can be seen arranged in a single row in the middle line. The urine, of course, all flows through this opening. The skin is scarred for some distance around. On November 16, 1860, Dr. Humphry dissected the scarred skin for about half-an-inch from all round the edge of the fistula, then took a flap from the right side of the scrotum, placed over the opening, and stitched its edges to the cut edges of the skin around. This flap quite covered over the fistula. Dr. Humphry had previously passed a staff into the bladder, and he now cut upon the staff from the perineum in the middle line, just in front of the anus, made an opening into the urethra large enough to admit his finger to pass into the bladder, and then, along the finger, introduced a gum-elastic tube, which was secured by bandage. April 4, 1861.—Two-thirds of the urethra is covered by the flap of skin, but part of it in front is open. Dr. Humphry dissected a flap from the left side of the scrotum to cover this. The tube still remains in the perineum, and carries off all the urine. June 4.—It is now very nearly closed. He still wears the tube. *Case* 5.—The Leeds General Infirmary: Mr. Teale.—A boy, aged 14, was admitted in January, 1860, with infiltration of urine following a severe blow on the perineum. A deep incision was made in the middle line of the perineum and also in various parts of the scrotum. No catheter could be passed into the bladder. The urine continued to flow through the perineum for five days, when retention supervened. Mr. Teale, having forcibly separated the sides of the wound in the perineum, tried to pass a catheter, and failing, punctured the bladder through the rectum. The canula was retained forty-eight hours, at the end of which time the urine again escaped by the perineum. A month was allowed to pass over, when, as no urine flowed through the meatus, and all attempts to introduce an instrument failed, perineal section was performed. A catheter was introduced and retained seven days, after which a metallic bougie was daily passed until his discharge in April. The wound in the perineum had then quite closed. In October he returned to the Hospital with a fistulous opening in the perineum, through which about half the urine escaped. The operation of perineal section was repeated, and when discharged in November he passed his urine in a full stream by the meatus, the wound in the perineum having quite closed. A No. 9 metallic bougie now (February, 1861) readily enters the bladder. *Case* 6.—The Liverpool Royal Infirmary: Mr. Long.—In this case (a man, aged 50) there were several fistulæ in the perineum through which nearly all the urine escaped. The urethra was thickened and indurated. A Syme's bougie was introduced, and the stricture divided with considerable difficulty, the part being very hard. An elastic bougie was retained in the bladder for forty-eight hours. The old fistulæ healed up, and when he left the Hospital he could pass his urine naturally with the exception of a few drops that escaped by the wound in the perineum, which had not quite closed. A No. 12 bougie could be readily passed. *Case* 7.—The Cheltenham Infirmary: Mr. Eves. (See *Case* 2, p. 472, vol. i., 1860).—In this case Mr. Eves performed perineal section. The man left the Hospital at his own request, several fistulæ remaining in the perineum.

THE NORTHAMPTON INFIRMARY.

PUNCTURED WOUND OF THE CHEST—RECOVERY.

(Under the care of Mr. MASH.)

[Reported by Mr. GRAY, House-Surgeon.]

G. W., aged 15, was admitted under Mr. Mash's care on the evening of June 25, 1858. An hour and a-half before

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admission he had fallen, with a large hayfork in his hand, from a load of hay, and was at once removed to the Infirmary, a distance of six miles, the injury he had sustained being unknown. On admission he complained of violent pain about the left shoulder, on stripping and examining which it was found that there protruded from it the thick end of a hayfork-prong, which had entered below and anterior to the acromion, glanced in front of the shoulder-joint, and could be felt by the finger to pass under the middle of the clavicle. The protruding portion was about half an inch long, and could not be moved in the least when grasped between the finger and thumb, forcible traction with which did not at all displace it; but on using considerable extractive force with a pair of common pliers, the fork-prong, seven inches in length, and curved after the manner of pitchforks, was withdrawn. Its removal was followed by a whistling sound, gusts of air being drawn into, or expelled from, the chest, through the wound, at every respiration. The wound, which was only just large enough to admit the fork-prong, and had been previously accurately plugged by it, bled but little, and was immediately closed by a pad of lint and a firm bandage. The integuments of the right chest, both anteriorly and posteriorly, as far as the spine, and as low as the lumbar region, were emphysematous, as also was the right arm as low as the wrist, both chest and arm being largely distended by the effused air. The breathing was laborious, 30 per minute, the patient rather collapsed, but not at all seriously so; there had been no hæmoptysis, and no other injury was detected except some contusion of the face. To take barley-water freely.

26th.—8 a.m.—Had slept a little during the night, but was fevered and distressed in the morning; no hæmorrhage from the wound, and no hæmoptysis or cough. Pulse 160, full and soft; chest very painful, respirations 42 per minute, short, dry, cough, hot skin, thirst. He was bled to incipient faintness (twenty ounces). A grain of opium was given, and black draught.

8 p m.—The bleeding had given great immediate relief, and he had felt much better all the day; pulse 110; tongue white; there was a little cough, but no expectoration. He was flushed and thirsty, but the bowels had acted freely, and the respiration was much improved.

27th.—Was much the same, and without any prominent symptoms. Ordered effervescing mixture, and to continue the barley-water diet.

28th.—Improving; emphysema subsiding.

29th.—Respiration quite natural; tongue white; pulse 80 per minute; still some emphysema over right chest and arm, but it was rapidly subsiding, and he could take a deep inspiration without inconvenience. In another two days he expressed himself as feeling quite well, and on July 10 he seemed perfectly recovered, and was in a few more days discharged well. Throughout the case there was an entire absence of any physical signs of pulmonary mischief, so far as could be judged in the emphysematous condition of the integuments. Before his discharge, when emphysema had subsided, careful examination failed to detect any indication of disease.

Mr. Gray adds:—The case seemed interesting, partly from the rather rare and formidable nature of the injury, and partly as exemplifying the fact, already, indeed, sufficiently demonstrated, that hæmoptysis is no necessary consequence of wounded lung. Whatever the precise direction in which the fork-tine might be supposed to have penetrated, it seems pretty certain that at least three inches of it must have perforated the lung, and the abundant emphysema testified to the wound of both pleuræ, yet there was never the least appearance of sanguineous expectoration.

GREAT NORTHERN HOSPITAL.

THREE CASES OF EXCISION OF THE KNEE-JOINT.

(Under the care of Mr. PRICE.)

During the past month the operation of excision of the knee-joint has been performed at this Hospital by Mr. Price on three occasions, and each patient has made the most satisfactory progress towards recovery. The following is a brief outline of the details relating to each case:—

Case 1.—A little girl, about six years of age, was admitted under the care of Mr. Price about the end of April, suffering severely from disease of the left knee-joint. The child had been under treatment for six months in one of the London Hospitals. Before her admission into the Great Northern Hospital, Mr. Price had given exit to the contents of two large abscesses which had formed and burrowed on either side of the articulation. It was at the same time ascertained that the joint was extensively destroyed, the cartilages having been in great part removed from the ends of the bones. Although the child was in a low state, and hectic had commenced, Mr. Price on May 2 removed the diseased joint. The articulation was found completely disorganised, scarcely a vestige of healthy structure being left. Only thin slices were removed from the bone ends. The patella was taken away. A single transverse incision sufficed for the clearing away of all the disease. The limb was placed firmly on a splint, such as this Surgeon always uses, and this before the lips of the wound were united by suture, so that, after the application of the retaining bandages, etc., it could be ascertained that the cut surfaces of the bones were in positive apposition. Little distress followed. Opiates were omitted at night, for the child, who before had not known what it was to sleep, rested calmly. On the eighteenth day she was out of bed, and on the twenty-first she was taken out for an airing in a perambulator. The splint was never once removed during the treatment. She now daily goes out of doors for some hours.

Case 2.—A girl, aged 14, was sent into the Hospital to be under the care of Mr. Price by Mr. Bishop, of Erith. She had been a sufferer for some time from disease of the left knee-joint. So severe had been the pain induced by the inflammatory changes taking place, that her constitution was giving way. The left lung was becoming affected, and a short troublesome cough told how the local disease was influencing the general condition of important organs. Mr. Bishop had adopted every kind of treatment short of operation. On admission into the Hospital the left knee was much swollen, and the leg flexed at an obtuse angle with the thigh. Intense pain accompanied the slightest pressure, which was generally referred to the condyles of the femur. The patella had become displaced on to the outer condyle. The limb would start at night and cause restlessness and sweating. The appetite had failed, and the patient was gradually declining in health.

On May 23, the patient being under chloroform, Mr. Price excised the diseased articulation. A large abscess was found in the internal condyle, which had not only destroyed a considerable portion of the cancellous structure, but had worked its way into the joint cavity by perforating the articular cartilage The head of the tibia was free from disease, so only a very thin slice was removed. The patella was taken away. Owing to the amount of disease in the femur, and the contracted state of the lower limbs, a considerable portion of bone, compared with what was taken away in the case first described, was removed. The limb was placed on a splint in the manner already described, and with the same precautions as to the apposition of the surfaces of bone, etc. The patient has progressed rapidly since the operation. There has been little or no pain, although considerable suppuration. The splint has not been once interfered with, and there is every prospect of the girl obtaining, in a short time, a very useful limb. The improvement which took place in the health immediately after the operation has been most marked. The patient slept well, the appetite has returned, and the cough has ceased.

Case 3.—A little girl, aged 6 years, met with an accident to the left knee in March last, by reason of a cart wheel tearing open the outer side of the articulation. On her admission into the Hospital, immediately after the occurrence of the accident, Mr. Wallis, the House-Surgeon, found that synovia freely escaped from the wound. The injured limb was placed on a splint, but severe local and constitutional symptoms followed. Large abcesses formed about the thigh and leg, which required opening. On one occasion, when the patient was under chloroform (May 16), it was discovered that the amount of disease and mischief in the joint was very considerable, and of such a character as to give but little hope of ultimate repair. The thigh had gradually swollen to three times its natural size, but there was little or no pain caused by a somewhat rough manipulation. The superficial epigastric and external mammary veins, during the time of this enlargement of the soft parts of the thigh, had gradually assumed a

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very varicose and dilated state, showing that, in all probability, the main vein of the lower limb was plugged. Mr. Price, however, did not think that this should prevent excision of the joint being performed, in preference to amputation through the thigh, as, doubtless the circulation would in time either be restored, or carried on through other channels.

On May 23, Mr. Price excised the articulation. The joint was found most extensively destroyed. The condyles of the femur were deeply ulcerated, and the patella worm-eaten. The synovial tissue had entirely disappeared. The head of the tibia was but slightly affected, although a portion of the head of the fibula had been torn away by the accident. Little blood was lost, and the parts came well into apposition. The limb was fixed to a splint. Notwithstanding the great œdema of the soft parts immediately concerned in the operation, healing rapidly ensued. Great relief was afforded by the operation. The varicose state of the superficial veins of the abdomen have not, however, subsided, but the swelling of the thigh is less. The child's health is much improved, and there is every prospect of a speedy recovery.

In each of these cases a transverse incision was practised, instead of the usual semilunar or H-shaped one, and the treatment has been so managed, that there has been no occasion to disturb, even in the least possible way, the original dressing and position of the parts.

GUY'S HOSPITAL.

OBSCURE CASES OF CANCER OF THE ŒSOPHAGUS.

Cancer of the œsophagus, remarks Dr. Wilks, is an affection which usually presents well-marked symptoms, as of stricture, etc., and is then of easy diagnosis; occasionally, however, dysphagia is wanting, or, rather, the difficulty of swallowing, being accompanied by loss of appetite and rapidly-increasing exhaustion, is overlooked, and then it becomes a disease eminently obscure. Dr. Wilks informs us that on several occasions the post-mortem examination has for the first time revealed the true nature of the disease, and this has especially been the case if the lung has been involved (through implication of the pneumo-gastric nerves?) and diverted attention to the chest. Among several cases which have been under Dr. Wilks's own care, he has had two where the prominent symptom of dysphagia was wanting, and thus the disease went unsuspected.

CANCER OF THE ŒSOPHAGUS PRESSING ON THE PULMONARY ARTERY AND SIMULATING ANEURISM.

(Under the care of Dr. WILKS.)

William N., aged 30, a carter, was admitted on June 2, 1860. He had felt unwell for several months, but scarcely knew what ailed him. He made few complaints on admission, stating merely that he had a pain in his back, and was too unwell to work. On carefully examining his chest, a distinct prolonged bruit was heard with the systole of the heart over midsternum. The position was remarkable, as well as the sound, and suggested amongst other conditions, an aneurism of the aorta. He was then asked if he had any difficulty in swallowing, and he said that he had, although he never volunteered the statement, and even then did not lay much stress on the symptom, his only complaint being pain in the back, or rather in the neck, dysphagia never being alluded to. This bruit, which was prolonged over both the systole and diastole, but distinct from both, when taken in connexion with the difficulty of swallowing, was supposed to indicate an aneurism. Thus he continued for some time, eating little, but never complaining of the effort to eat. He had much pain in the course of cervical nerves on right side. He subsequently became much worse, by implication of the right lung, and went home to die. Dr. Wilks hearing of his death shortly afterwards, went to his residence to make the post-mortem examination. Both lungs were in the early stage of hepatization. In the middle part of the œsophagus there was a mass of cancer which was involving the lung on each side; the disease was much more extensive than usual, not only affecting the walls of the tube, but projecting in the form of a tolerably hard mass the size of a small egg. This pressed on the right side of the heart, obstructing apparently both the tricuspid and pulmonary orifices; the latter, especially, was considerably compressed by the disease. The great difficulties of an examination in private, precluded a very accurate observation of the relation of the parts; sufficient, however, was seen to afford an explanation of the bruit and so of the mistaken diagnosis.

CANCER OF THE ŒSOPHAGUS OPENING INTO THE AORTA.

(Under the care of Dr. WILKS.)

Margaret H., aged 60, admitted April 17. On admission she appeared ill, but made no especial complaint. She had worked hard, and appeared to be rather worn out than suffering from any positive disease. About a fortnight after admission, she spat up a little blood, and this led to a further examination of the chest, but nothing could be discovered. Two days before death, she spat up a little more blood, and at the time appeared very low. On the following day she again spat up some blood, and died.

Autopsy.—The body was extremely blanched. There was extensive carcinoma of the middle part of the œsophagus, circumscribed above, but eating its way through the walls, and involving the lung on the left side. At each end the canal was somewhat constricted, but the diseased part formed a sacculus which was full of *débris* and coagulum. The cancer was seen as a white deposit, and outside was the hypertrophied muscular tissue. The walls were eaten away on the left side, so that on removing the left lung the diseased œsophagus was opened. At this part also, it opened into the aorta by a hole of considerable size, having apparently proceeded along the bronchial artery and eaten off its origin. The inner coat of the aorta was detached from a softening process, and could be stripped off for a considerable distance from the spot. The adjacent lung was consolidated and softening, and in one part a sloughing cavity. Chronic pneumonia at the apex. The left ventricle closely contracted, as in hæmorrhage. The stomach and the duodenum were quite full of clot. There was a large coagulum modelled to the stomach, and serum above it. The intestine below contained blood.

ST. BARTHOLOMEW'S HOSPITAL.

FRACTURE OF THE TIBIA—DELIRIUM TREMENS—TREATMENT BY LARGE DOSES OF DIGITALIS—RECOVERY.

(Under the care of Mr. LAWRENCE.)

[Reported by Mr. GREENHILL, House-Surgeon.]

Mary C., aged 60, was admitted into St. Bartholomew's Hospital, on January 8, 1861, for fracture of the tibia and fibula. On the evening of the 10th symptoms of delirium tremens appeared, when she was given forty drops of tincture of opium. She became worse during the night, when another dose was given which after an hour was repeated. At ten a.m. thirty drops were given, which, producing no decided effect, it was repeated, the dose being increased to forty. At four p.m. being no better, three drachms of tincture of digitalis were given. The pulse at that time was 140. About two hours afterwards it was reduced to 112. Two hours later she began to doze, but in rather more than an hour after she vomited the greater part of her medicine. She soon, however, went off to sleep again and so passed a good night, waking only occasionally for a short time.

Next day, the 11th, she appeared much better. Her pulse was now 100 and of tolerable volume. Since this she had no return of the delirium.

GERMS AND VESTIGES OF DISEASE.—Dr. Dobell's Lectures have been continued, and have been well received by an attentive audience. He has considered the Correlation of Physical and Vital Forces, the Conservation of Force, and the bearing of various Conditions of Existence upon Disease in general. The Natural History of several diseases has also been analysed, and the Fatality of Disease examined with reference to Vestiges of Previous Disease.

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Medical Times and Gazette.

SATURDAY, JUNE 15.

COUNT CAVOUR AND HIS DOCTORS.

The death of Count Cavour has filled all Europe with grief and consternation, and mingled with these feelings there is one universal sentiment of execration at his Medical advisers. The *Times'* Correspondent writes thus:—

"Turin, June 6.

"*Consummatum est.* Count Cavour died this morning at seven o'clock. It was understood yesterday that the night would be critical, and the issue of the crisis was scarcely doubtful, as the sufferer had not rallied in the morning, as had been the case with him in the previous days. All power of reaction had left him, and the new attack of fever was sure to find him powerless.

"The Romans, it is said, crowned on the Capitol the Physician who rid them of Pope Adrian VI. The Italians of our own days would honestly hang Count Cavour's doctors if the execution would afford any relief to their feelings. There never was a clearer case of a man murdered by his Medical attendants. Within a very short period of five days they attempted to cure the Count of four or more different complaints,—congestion of the brain, typhus fever, intermittent pernicious fever, brain fever, dropsy, and lastly, gout; and for all these diseases they could think of nothing but their own sovereign remedy—the lancet. I think these excellent Practitioners are worthy to send down their names to posterity. They were,—Dr. Rossi, Dr. Mattoni, and, towards the end, the King's Physician, Riberi, the same in whose hands the mother, wife, and brother of Victor Emmanuel expired, one by one, in the early months of the fatal year 1855. Dr. Tommasi, who was summoned from Pavia by Cavour's friends was not admitted to consultation.

"Notwithstanding frequent fits of delirium, Count Cavour seemed to have a distinct presentiment of his fate. Seeing himself alone with his domestic attendants, yesterday, he asked with great serenity, 'whether his Doctors had forsaken him?' On being answered, with surprise and concern, that they could never have thought of leaving him for a moment, he replied with a smile, '*Domattina, gli abbandonero io*' ('It is I who shall quit them to-morrow morning')!"

We are without any authentic details of the nature of the Count's illness, and of the motives which prompted the treatment, but the following series of extracts from telegrams and letters published in the newspapers seem to tell us enough to enable us to form a judgment on both:—

"*Turin, May* 31.—Count Cavour was taken ill yesterday, and was then bled. He is, however, better to-day."

"*June* 1.—The health of Count Cavour has improved."

"*Turin, June* 1.—Count Cavour's indisposition exhibits all the symptoms of his previous attacks—a sudden seizure and speedy recovery. He was bled four times within three days, Last evening he had already recovered, and to-day he was expected to leave his chamber. The complaint is congestion of the brain, arising from intense occupation, want of bodily exercise, and either too strong an appetite or else excessive indulgence in the pleasures of his well-appointed table. Periodical bleeding has become with him, as with too many of his countrymen, a matter of necessity."

"*June* 2.—Count Cavour has again been taken ill, and was bled twice in the course of yesterday."

"*June* 3.—Count Cavour is recovering."

"*June* 3 (Evening).—On Sunday Count Cavour passed a restless night. He was bled this evening for the sixth time, and is now better.

"His Physicians declare his illness to be a very mild form of typhus fever, without any very alarming symptoms." (The letter speaks of "cold shivering fits and slight delirium.")

"*June* 4.—At two this morning Count Cavour had an attack of fever, which was preceded by a fit of shivering. At noon all these symptoms disappeared."

"*June* 5.—The fever continues."

"8·30 p.m.—The Physicians declared they entertained hopes that their patient would pass a more quiet night."

"*June* 6.—Count Cavour died at seven this morning."

From another Correspondent, same date:—

"Count Cavour died this morning. On Wednesday last he received some despatches from Paris about the Roman question which preyed heavily upon his mind, and excited him beyond measure. He drove from Parliament at three o'clock straight to his country seat at Leri, took a long walk across the dewy meadows, and caught cold. He returned on Thursday, the blood rushing strongly to his head. The Physician, believing that it was an incipient attack of apoplexy, bled him, and within three days repeated the bleeding five times on account of the congestion. On Monday it was found to be a typhoid fever, or, according to others, *febris tertiana intermittens perniciosa*. He became yesterday delirious, and died at seven this morning."

So far as we can judge, then, from the accounts which have reached us, the poor Count's illness seems to have been a violent fever, accompanied with distinct remissions, and with a large amount of brain disturbance in the paroxysms, and perhaps some gouty symptoms complicated the case. The fever is one with which we are not familiar in England at the present day, but it will be recognised by every one who has perused the works of the Greek and Latin classic Medical authors, or the works of those who have treated of the malarious fevers of the South of Europe, Syria, the Coast of Africa, and the West Indies. *Mutatis mutandis*, Count Cavour's case reads like that of Philiscus, reported by Hippocrates in the first book of the "Epidemics," or that of Silenus, "who lived in the Broadway, near the house of Evalcidas, and from fatigue, wine, and unseasonable exercise was seized with fever." That the treatment consisted in, or comprised loss of blood, largely, repeatedly, and we fear injuriously, seems also clear. And on this last point the interests of the Profession, and of humanity, require that we should make some observations.

Blood-letting is one of the most ancient and popular remedies, and it is hard to say whether the benefit produced by the prompt and vigorous use of it on occasional emergencies, or the mischief resulting from the indiscriminate and reiterated abuse of it is the more striking. The causes which brought it into use were doubtless these—first, the enormous benefit produced in certain fevers by spontaneous outburst of blood from the nose or elsewhere; the fact that violent splitting headache, hot skin, bounding pulse, and flushed countenance, all seem to clamour for the relief which bleeding often gives; and even granting that there are many fevers, with spontaneous hæmorrhage, in which the bleeding does more harm than good, yet it is difficult, in an early stage of art, to distinguish these pernicious hæmorrhages from "abortive efforts of Nature," and so bleeding gained the repute of being a thoroughly natural remedy. Secondly, it is a very agreeable remedy. Were you ever bled, courteous reader? If not, you can have no notion of the lightness, the disencumbered feeling, the disembarrassed head and breathing, and the sensation of delicious languor, which follow a moderate abstraction; and lo! are not the same feelings experienced after the Turkish bath? Thus, if there be any disease whatever attended with local pain or throbbing, there is no doubt that these sensations are lost for a time. No matter whether the case be that of a robust youth with pleurisy, to whom the bleeding brings instant relief, which relief continues; or whether it be a case like that of the poor soldiers at Bilbao, clamouring to be bled, as Guthrie tells us, when suffering from Hospital gangrene, and in whom the relief was but transitory; yet there is no doubt but that bleeding does, in most cases, produce a change of sensation, if not a temporary cessation of pain,—even though this cessation be purchased by following aggravation. Then, in the third place, popular opinion in most countries is, or was, much in favour of bleeding as a panacea, and in

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countries where the Physicians are few, poor and powerless, popular opinion has no small weight. In England thirty years ago there were few Doctors who dared omit bleeding, in most acute diseases or injuries. Sixty years ago the town was in an uproar because of a squabble of Physicians; Lord B. was ill; Dr. B. was called in, and would not consent to bleed; and so great was the interest excited, that old George the Third, with kindly curiosity, sent for the Physician, to hear from his own lips what were the extraordinary reasons why he would not bleed a sick man! Country Surgeons, with the fear of a Coroner and Jury, could not dare omit bleeding in any case whatever of fit or of sudden injury. Not to have bled, would have subjected them to loss of reputation, even if they had escaped a verdict of manslaughter. On one occasion, in our boyhood, all the population of a district joined in accusing a Surgeon of something like murder, because he had not bled a man who died of apoplexy in the fields, and was brought home dead, but not quite cold. A poor wretch made a descent from a balloon, with a parachute which he trusted would bring him safely to the earth. He fell, however, and was smashed into a jelly; nevertheless, the Surgeon received the approbation of the Coroner's jury when he said that he had attempted to bleed him. The population used to be bled in the Spring, as a habit; and for the slightest giddiness or headache; and bad as the remedy was, they no doubt got some sort of relief for a time. Be it remembered that the population of Turin, who are ready to hang the Physicians now that their idol is dead, were only anxious during the first two days of his illness lest the Phlebotomist should arrive too late. But it is not the empirical observation of Nature, developed into a popular faith, which has caused Physicians to bleed in excess within the 19th century. It is *theory;* nay, let us own, it is *Scottish* theory, which blinded the eyes of Physicians so that they could not see what was before them; it is *system*, it is the insane desire of forming classifications which shall account for all nature in health and sickness. From Scotland came the Brunonian, or brandy-bottle theory, which claimed Debility as the parent of all diseases, and stimulants as the remedies. The wiser Italians improved Brown's theory, by creating the idea of two opposite morbid states; one with excess of vital power, to be treated with bleeding and contra-stimulants, as tartar emetic; the other with deficiency of vital power, to be treated with stimulants. But it is to Cullen and John Hunter, with their theory that diseases consisted in wrong "actions" of the living solids, that "inflammation" consisted in "extreme action," and that bleeding was a remedy for extreme action, that that blind adherence to bleeding was due, from which we are but lately delivered. Up to thirty or forty years ago we were all *solidists*—that is, we concerned ourselves about the hardness of the pulse and other "actions of the solids," but took little note of the composition of the fluid elements of the body, the study of which was denounced as the "obsolete humoral pathology." Up to that time no doubt many patients with feverish diseases were bled, and if they got no better were bled again; and if they died, it was supposed they had not been bled sufficiently early or enough. Since that time, a change for the better has come over us; bleeding is restricted to the early stage of inflammatory disorders in robust persons, and if done, is done thoroughly, once and for all. More refined methods are in vogue for purifying the blood by the agency of the various eliminating organs, and for calming perturbations of the nerves; whilst great care is taken from the first to supply such an amount of bland nourishment as shall obviate the tendency to exhaustion, which soon comes in most acute diseases. In the absence of fuller details, it is wrong to judge, but it certainly seems to us that in any remittent fever, supposing any bleeding to be necessary for the relief of some existing complication, one bleeding, or two at the most, would suffice. In that disease bleeding may mitigate the paroxysm, but cannot prevent the return; and it is like gambling with human life, or like borrowing money to be repaid with enormous interest, to get temporary relief by an expedient so rapidly exhausting.

THE WEEK.

Our readers will hear, and most of them with great satisfaction, that the election of Members of Council of the College of Surgeons is not to pass over this year in the usual routine manner. An attempt will be made to reform the old system of re-electing retiring Members as a matter of course. It has long been felt that this system did not lead to what all true friends of the College must desire, namely, that the Council should consist of the most distinguished Surgeons in England. Simple seniority led to election; and "once elected always re-elected" became the rule. A large body of Fellows now determine that mere seniority shall not necessarily secure election; and that the members who retire annually according to the laws of the College, shall not be re-elected without a real contest. There is no personal feeling whatever against the three Members who retire this year—Messrs. Bishop, Macmurdo, and Solly. Their re-election is opposed in order to establish a principle. Mr. Adams of the London Hospital, Mr. Fergusson, and Mr. Paget, of Leicester, have been nominated according to the legal form, and we trust that the Fellows will attend on the 4th of July, and vote for the three men whom they conscientiously believe are most deserving of the honour of a seat in the Council,—the men who are the truest representatives of English Surgery, and who are the best qualified to maintain the rights of the *College* as a great Professional body, with a secondary regard to the special interests of the *Council*. We need only add that the voting will be by printed lists. The names of the six candidates will be printed on a sheet of paper. Each Fellow will be supplied with a sheet, and will draw his pen through the names of any three of the candidates. He will then fold the paper and deposit it in a ballot box. This is beyond all doubt a great improvement upon the mode in which the ballot has been conducted heretofore.

On June 7, a meeting of the Medical Profession of Scotland was held at the College of Physicians, Edinburgh, for the purpose of considering the propriety of obtaining some modifications of the law now affecting the insane.

Dr. Alexander Wood, who occupied the chair, said, "There were two points of view in which they could look at a question like this. One was the point of view which the public were too apt to take, the other the point of view which the Medical Profession necessarily took, and which he trusted in this meeting would receive a prominence and attention which it was not likely to receive in a public meeting or from the Legislature. If they looked to the reports of Parliamentary Committees—of Parliamentary Commissions he would speak immediately—if they looked to the various legal writings on insanity—if they took the general impressions of the public, as they could gather them in conversation, or as they could read them either in the imaginative pages of the novelist, or in the dry details of legal authority, they would see at once that there was one idea predominant with the public, that the great object of all legislation in regard to lunacy should be this—to protect the patients as much as possible from the chances of being unnecessarily immured in asylums, or of having their liberty tampered with in any way. But they, as Medical men, looked at the question from the other side, and regarded it in a very different point of view. They must look upon these unfortunates as afflicted with a disease, perhaps the most serious to which the human frame was subject. They must look upon them as afflicted with a disease which statistics prove indubitably to be one of the most curable acute affections, if taken at an early stage, to which man is subject; and one of the most incurable, if neglected in its

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early stage; and, therefore, their great object was to protect lunatics from the affliction incident to the disease, and place them in the condition most favourable to their cure. Thus there were two antagonistic principles, which were continually struggling the one against the other in all discussions on the management of lunatics—the idea of the public and of legal functionaries that lunatics required protection against Medical treatment, and the natural idea of the Doctors that lunatics required Medical treatment, and ought to have it as early as possible."

Dr. Douglas Maclagan moved the first resolution, which was as follows:—"That the present Medical certificate is unsuitable. That it should simply bear that the undersigned Medical men separately visited and examined A. B. (on such a date), and found him to be of unsound mind, and requiring confinement in an asylum. That this certificate, coming from two qualified Practitioners, appears to be amply sufficient, and to require no statement of facts to be appended to it." There was this inconvenience in the present system: that some Sheriffs accepted the certificate as evidence of insanity; others scrutinised the facts, and judged of the case themselves.

Dr. Mackenzie, Kelso, moved the second resolution, which was as follows:—"That the period during which a person may be confined on an emergency certificate is too short, and should be extended from twenty-four hours to three days."

Dr. Peddie said: The resolution which I have been requested to move is the following:—"That many cases of excessive intemperance depend on disease, and constitute a form of insanity. That such cases cannot be treated without confinement more or less strict. That in the present condition of the law, such treatment is frequently unattainable. That some cases of the kind require treatment by confinement, not different from that enforced on other insane persons. That for many more a different system of treatment is desirable. That although such a system of treatment has already been established in various institutions in Scotland, into which persons are admitted with their own consent, yet it seems necessary, in certain cases, to afford the means of enforcing admission into such institutions; and that such institutions should be licensed, subject to the jurisdiction of the Lunacy Commissioners, and conducted under such regulations as the Act may direct."

Dr. Andrew Wood moved the adoption of the next resolution, which was as follows:—"That it is desirable that the consent of some public functionary be interposed—as is now the practice in Scotland—betwen the Medical certificate and the confinement of the insane person; and that no public functionaries appear to be better suited for this purpose than the Sheriffs of counties and their substitutes."

This resolution, as may be expected, was opposed, and the following amendment offered by Dr. Charles Bell:—

"That it is not desirable that the consent of any public functionary be interposed, as is now the practice in Scotland, and nowhere else required, between the present Medical certificate and the confinement of the lunatic; the present system being only derogatory to the Profession, being prejudicial to the patient, forming, as has been found, no protection whatever against vexatious prosecutions, and converting that which ought to be a strictly private Professional duty into a public judicial act, which unavoidably associates it with the idea of criminality. That, as a substitute for the present form of procedure, it should be required that intimation be made without delay to the Commissioners in Lunacy, of the confinement of the lunatic, with copies of the documents on which the removal has proceeded, they being invested with full powers."

Ultimately, however, an amendment in the following terms was offered by Dr. W. T. Gairdner, and passed by a large majority; and a memorial to be drawn up and presented to the Lord Advocate in consonance with it:—

"That the existing form of the Sheriff's jurisdiction in cases of insanity is objectionable, as tending to delay and obstruction in the admission of cases of urgency into asylums, and also as interfering with the Physician's province, which is to judge of the circumstances under which treatment in asylums is required, and that the security of the public requires [illegible] competency and good faith of the Medical men [illegible]ficate should be placed beyond suspicion That the Lord Advocate be requested to take these circumstances into his consideration, with a view either to the amendment of the Sheriff's jurisdiction or to its being replaced by some other provision for accomplishing the object in view."

The *Union Médicale* makes the following comments on the recent decision of Vice-Chancellor Stuart as to the viability of an infant:—

"The circulation in the cord goes on during fœtal life and cannot be cited in favour of extra-uterine life in the absence of cardiac beating, external movements, and especially of respiration. The child is only really brought to light—to the external life—by respiration; and it is safer to deny extra-uterine life when respiration is absent than to affirm it because there have been some slight pulsations of the cord during a minute! It is upon this principle that, in cases of infanticide, we decide if the infant has lived by immersing the lungs, to discover if air has entered them. It appears to us, then, that a false judgment has been given in this case."

The resignations of Mr. Cæsar Hawkins and of Mr. Cutler lead to two appointments for Surgeons, and two for Assistant-Surgeons, at St. George's Hospital. Mr. Prescott Hewett and Mr. Pollock will, doubtless, succeed, as a matter of course, and a matter of right, to the two Surgeoncies. Mr. Holmes and Mr. Gray are candidates for the Assistant-Surgeoncies. Their claims are very strong, and are not likely to be contested. We need not add that the good wishes of their Professional brethren go with Mr. Hawkins and Mr. Cutler in their retirement from Hospital duties. Both have had a large private practice for many years, and enjoy the respect and confidence of a large circle of Medical friends.

As hot weather may now be expected, the following observations of Dr. R. D. Thomson may prove useful in preventing accumulation of stable and cow manure:—

"Last year," he says, "a deputation of Medical Officers of Health to the Home Secretary, of which I formed a member, urged the importance of a legislative provision, by which Vestries and Local Boards should be empowered to contract for the removal of manure as in the case of dust, since this appears to be the only mode of providing against the present difficulty experienced by horse and cow keepers of having such refuse conveyed away. I trust that, in the amendment of the Local Management Act, this important subject may not be overlooked. The Medical Officers have succeeded in obtaining, in the same Act, a clause which places the management of cow houses under local governments, and will thus enable Vestries, etc., to carry out any regulations which they may devise for the sanitary improvement of many of these sheds—and particularly for the more frequent removal of refuse than can at present be effected under the existing law."

REVIEWS.

A Manual of Botany, including the Structure, Functions, Classification, Properties, and Uses of Plants. By Robert Bentley, F.L.S., M.R.C.S.E., Professor of Botany in King's College, London. Illustrated by nearly 1200 woodcuts. Pp. 811. London: 1861.

This is a handsomely got up work, of the manual size, and abounding in illustrative woodcuts. The particular object of it seems to be to give a sufficiently full account of theoretical botany, including what is known of the structure, physiology, and classification of plants; and also to introduce a large share of information on their economic and medicinal uses, so that it may serve the purpose of the student who desires to shape his knowledge of botany in such a way as to assist him in learning the materia medica, whether his career is to be that of Physician or Pharmaceutist.

The first division of the work contains an account of structural and morphological botany; beginning with the

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simplest elementary tissues, and proceeding to the structure of the more complex organs. The second gives an account of systematic botany, and the nature of various systems of classification, with a compendious history of all the various natural orders, from the highest to the lowest, and a notice of the individual genera or species in each order, which are of interest owing to their useful or poisonous qualities. A brief account of physiological botany concludes the whole.

A work with such an amount of matter to be treated of, requires the most perfect arrangement, and the clearest language. In these respects Mr. Bentley leaves nothing to be desired. His style is easy, and whoever begins, finds it agreeable to read on.

The study of botany is one which deserves the attention of almost every person of any rank or occupation. There is absolutely no one who may not derive interest from the power of distinguishing the name, class, and properties of any plant, even although ignorant of the minute physiological details, which require the microscope for their full explanation But to the student of animal physiology, a competent knowledge of botany is essential, as an interpreter and complement. Without a knowledge of the minute structure of plants, he cannot interpret that of animals, and he cannot fully appreciate the existence of animal life in health or disease without a knowledge of the influence of vegetables on climate, soil, and atmosphere, as well as in their function as nutriment. It is scarcely possible that anyone who has heard of the experiments of Hales, on the force with which the sap ascends the vine, and who knows that the vital changes in the extremities are the cause of the circulation, shall give entire assent to the popular Medical notions of the omnipotence of the heart, and ignore organic changes as causes of the distribution of blood in animals, in health as well as in disease. We cordially commend, then, the study of Botany as a healthful recreation, and as a preparation for the Medical curriculum; and we are glad that Mr. Bentley has added this readable and compendious volume to the list of standard works on the subject.

On the Influence of Atmospheric Changes upon Disease. By Arthur Ransome, M.B. Cantab., etc., and George V. Vernon, F.R.A.S., etc. (In the Memoirs of the Literary and Philosophical Society of Manchester.) 1861.

This very valuable paper contains a careful comparison of the Returns of Disease and of Meteorology, made and published in London between April 11, 1857, and November 6, 1858, under the care of the Board of Health. These Returns comprised the diseases occurring at the Charitable and Public Institutions of London, and were collected by the Metropolitan Medical Officers of Health. The writers have constructed two charts, in one of which the changes in the atmosphere, and in the other the prevalence of certain diseases is represented by curves. With respect to diseases the prevalence of which is mainly influenced by temperature, the results are striking. Thus, diarrhœa is greatly favoured by a temperature above 60°; dysentery in a less degree than diarrhœa; pneumonia, bronchitis, and catarrh produce a curve corresponding to reduction of temperature; pleurisy appears uninfluenced; continued fever is rather favoured by heat and opposed by cold, but on the whole not much influenced. "The measles curve seems to rise with the fall of the temperature, and *vice versâ*; and the influence of this element is less marked when it is above or below the forty-three years' average;" whooping-cough equally is influenced by extremes; while scarlatina seems most favoured by a large amount of aqueous vapour in the air, especially if combined with low barometric pressure and low temperature.

Ready Rules for Operations in Surgery. By Allan Webb, M.D., F.R.C.S.L., formerly Surgeon to the Native Hospital, Calcutta. Second Edition. Large 8vo. London: 1861.

This work is peculiar in its arrangements. Every operation is displayed in a separate table, in which one side gives the duties and proceedings of the operator during various stages of the work; and the other the duties of the assistants, printed in red ink. A list of every instrument and appliance necessary is also given.

The Legal Relations of Insanity. By David Skae, M.D., F.R.C.S.; read before the Royal College of Surgeons, March 1, 1861. Pp. 26. Edinburgh: 1861.

Dr. Skae insists on the importance of defining insanity to be "a disease of the brain, affecting the mind." No absurd, nor eccentric, nor criminal actions, constitute insanity of themselves, any more than a single symptom constitutes any disease. The detection of the brain disease, and of its existence, is as much the function of the Physician, as is the diagnosis of measles,—and not of the Lawyer; and the intervention of legal practitioners, as if insanity were a crime, is a mischievous obstacle to the treatment of insanity in Scotland.

Statistical Report of Cases of Insanity treated in the Mount Stead Retreat. By G. Pyemont Smith, M.D. No. 1. Pp. 22. Leeds: 1861.

This report is creditable, although it does not present many facts for remark. It seems that of 153 cases of insanity, 43 were caused by moral or emotional causes, as anxiety, religious excitement, etc.; 85 by physical causes, as fever, intemperance, and the puerperal state; in 25 the causes admit of no classification.

Report of the Committee of Visitors of the Lunatic Asylums for the North and East Ridings of Yorkshire. York: 1861.

A good, business-like report. Future historians of the social state of England may learn that the cost of patients at County Asylums averages little more than 7s. per week. At Gheel the charge is not quite 4s.; but the diet and attendance might be improved with benefit.

The Cottage System and Gheel: an Asylum Tract. By Joshua Sibbald, M.D. Pp. 32. London: 1861.

Gheel is a small town in Belgium, where a miracle is alleged to have been wrought on some lunatics in the seventh century, and where the inhabitants have ever since had the custom of receiving and treating persons affected with the less severe forms of insanity. At present the town and surrounding districts contain 11,000 inhabitants, by some of whom 800 lunatics are taken charge of in their own cottages. This quiet, uncostly system seems to have many advantages in certain cases, and persons interested in insanity will do well to read Dr. Sibbald's preface.

Metanoia: a Plea for the Insane. By Henry McCormac, M.D., Consulting Physician to the Belfast General Hospital. Pp. 16. London: 1861.

"The notion," says Dr. McCormac, "that insanity is merely a cerebral disease, is only fit for that limbo to which Milton consigns 'things shapeless, fantastic, and unreal.' The whole hypothesis is at issue with the deliverances of consciousness, the only source and fountain of truth." We cannot follow Dr. McCormac in his argumentation, but we may fully applaud, however, the humane treatment he advocates.

Tenth Annual Report of the Wilts County Hospital, Devizes, for the Year 1860. Pp. 52.

This appears to be an economical and well-managed Asylum, and the Report does credit to Dr. Thurnam, the Medical Officer. It contains an amusing instance of the horrid want of intellectual cultivation in the "West Country"—a Relieving Officer wrote to know whether it was *really* true that a certain patient had been bled to death or stifled in the Asylum!

Operative Surgery Adapted to the Living and Dead Subject. By C. F. Maunder, F.R.C.S., etc. Part 2. London: 1861.

This part of Mr. Maunder's useful work contains the amputations and the special operations in various regions of the body. It is a short, unaffected treatise, well adapted for use during a course of Operative Surgery.

Cholera, its Cause and Infallible Cure; and the Epidemics in General. By J. M. Honigberger, late Physician to the Court of Lahore. Pp. 28. Calcutta: 1861.

A mystical absurdity, recommending quassia as a means of killing the alleged infusoria which cause cholera.

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British Wild Flowers. Illustrated by JOHN E. SOWERBY. Described by C. PIERPOINT JOHNSON. 8vo. Pp. 168. London: 1860.

THIS very handsome volume comprises eighty plates of twenty figures each, carefully drawn and well coloured. With the short Introduction and Glossary, and the Descriptive Catalogue, it forms an illustrated manual of British Wild Flowers which can be warmly recommended to our readers and to their botanical friends.

FOREIGN CORRESPONDENCE.

AUSTRIA.

VIENNA, May 20.

TYPHOID FEVER.

THE epidemic of typhoid fever which commenced here quite suddenly towards the end of April, when the weather took an unfavourable turn, and north winds became prevalent, is happily decreasing in extent, although the cases which are now brought into the Hospitals, are of a more severe form than those which occurred in the commencement. Patients suffering from chronic diseases, who where in the General and Wieden Hospitals, when the epidemic broke out, have been taken to a country Hospital at Kloster Neuburg, to make room for those affected with fever; still both the Town Hospitals named, and also the Garrison Hospitals, are so full, that beds are placed even on the corridors, and temporary wards have been taken in those suburbs where the cases are most numerous. Twelve apartments in the Augarten Palace, a large building in the middle of a park in the suburb Leopoldstadt, have, by order of the Emperor, been appropriated to typhoid patients, and 140 of them have already been received there. In the General Hospital, there are now 2212, and in the Wieden Hospital, 1044 patients, most of whom are suffering from typhoid fever. In the commencement of the epidemic, catarrhs of the respiratory organs were very common complications, while now the stomach and the intestines are more considerably affected. We fervently hope that the favourable weather which has at last set in, may soon put an end to this epidemic.

THE IMPERIAL ACADEMY OF SCIENCE.

Professor Brücke recently brought before the Academy of Science, his latest researches on the physiology of digestion. He had formerly shown that the theory of peculiar soluble substances, called peptones, which should be formed by the action of pepsine and lactic acid upon albuminous food, and should be absorbed into the blood, was untenable. He now extended his inquiries to the question, whether pepsine was really an albuminous ferment, as is generally believed. Professor Brücke denies altogether, that pepsine is albuminous matter. All reasons which have been adduced for this supposition are, according to him, quite insufficient to prove it, and he has himself prepared fluids, which had a powerful digestive action, and were deposited by perchloride of platinum and acetate of lead, but did not show a yellow colour on addition of nitric acid and ammonia; and in which strong nitric acid, sublimate, tincture of iodine, and tannine, did not form any trace of deposits. He also denies that pepsine is a ferment. Pepsine is not decomposed during digestion, but is absorbed in the small intestines, and is found not only in the urine, but also in the muscular juice.

Professor Ludwig recently brought under the notice of the same learned corporation a series of researches undertaken by a pupil of his, Dr. Adam Politzer, on the physiology of hearing. The controversy about the innervation of the muscles of the middle ear has been decided by vivisections made by the gentleman just named. As subjects for experiments he used the heads of dogs recently killed, which are especially fit for researches of this kind, as in them the cavity of the tympanum and the muscles of the malleus are very large; and also because this muscle and the isolated nerves of the skull retain their excitability some time after death, and after the cerebrum has been taken out. The result of the electric excitation of the isolated nerves in the cavity of the skull was, that the motor part of the trigeminal nerve animates the tensor tympani muscle, while the central fibres of the [illegible]nimate the stapedius. The action of these muscles was shown in several ways. The membrana tympani was separated from its insertion, and was, by means of a small manometer, connected air-tight with the external opening of the ear. The influence of the contractions of the tensor tympani upon the ossicles of the ear and upon the pressure of the fluid in the labyrinth, was also determined. It was seen that if the tensor tympani was excited, the joint of the incus and stapes changed its place towards the fenestra ovalis; and if the superior semi-circular canal on the scala vestibuli on the promontorium was opened, the fluid was seen to move on electric excitation of the trigeminal nerve. The mechanism of the closing and opening of the Eustachian tube was shown by simultaneous manometry of the external opening of the ear and the fauces in man. It then appeared, that the tube is generally closed, but that under certain circumstances its walls are so wide apart, that a direct communication exists between the air of the cavity of the tympanun and the fauces. The tube is opened partly by muscular action, and partly by a diminished or increased pressure of air in the cavity of the fauces. The opinion generally held until now, that the air is condensed in the posterior space of the fauces, and pumped into the cavity of the tympanum, if a movement of deglutition is made, while the nose and mouth are closed at the same time, has thus been refuted, and it has been shown, by introducing the manometer into the fauces and the external opening of the ear, that the air in the posterior space of the fauces and in the cavity of the typanum is rarefied. Finally, the influence of variations of the pressure of the air in the cavity of the tympanum upon the pressure of the contents of the labyrinth, was inquired into. These experiments were also made on the human ear; a mercury apparatus, especially constructed for the purpose, was alternately air-tight inserted into the external opening of the ear and the tube, by means of which a constant diminution or increase of the pressure of the air could be produced *ad libitum*. The variations of the pressure in the labyrinth which are produced from the external opening of the ear, if the cavity of the tympanum *is open*, by the movement of the ossicles dependent upon the membrane of the tympanum, amount to one-third of those variations of pressure, which are caused from the tube, if the cavity of the tympanum is closed. It therefore appears that the sensation of fulness and pressure in the ear, the slight amount of deafness, the ringing in the ears, which anyone may produce by increasing or diminishing the pressure of the air in the cavity of the tympanum, are due to the influence of the variations of the pressure in the cavity of the tympanum upon the pressure, under which are the contents of the labyrinth; and these results are no doubt of great importance for the pathology and diagnosis of the diseases of the ear.

THE HYPODERMIC TREATMENT.

Dr. Scholz, one of the Surgeons to the General Hospital, has recently resorted to the subcutaneous injection of medicines into the cellular tissue, in a number of cases, with very satisfactory results. He employed for this a common surgical needle, with a lancet-shaped edge, to pierce the skin, which was raised in a fold, in order not to wound the aponeurosis. He then penetrated about half-an-inch below the surface of the cutis, and inserted Anel's syringe filled with the fluid to be injected into the wound; an assistant drew out the needle, and the fluid was thus injected; after this the skin was covered with a piece of india-rubber plaster. The medicines used were one or one and a-half grains of the acetate of morphia dissolved in twenty grains of distilled water, or one-twentieth of a grain of valerianate of atropine, dissolved in the same quantity of water. The injection of these medicines was always followed by symptoms of intoxication, varying from slight indisposition to vomiting and fullness in the head. Atropine also caused a dilatation of the pupils. At the spot where the injection had been made, unpleasant symptoms, such as inflammation and suppuration, never occurred. Most of the patients requested the repetition of the operation, which had afforded them great relief.

The valerianate of atropine was used in two cases of convulsions in young women. It was injected into the cellular tissue at the epigastrium, as the patients asserted that the first sensation of the spasms began there, then extended upwards to the larynx, and ended with loss of consciousness. The effect in these two cases was not very striking; but the injection of the acetate of morphia gave excellent results. A

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woman who suffered from tuberculosis of the lungs and the cervical vertebræ, which latter caused her such acute pain that she was prevented from sleeping, was greatly benefitted by the hypodermic treatment. In another case of tuberculosis of the lumbar vertebræ, the result was even better, as the pain, after the immediate soothing effect of the operation had passed off, never again reached that degree of intensity which it had done before. In a case of internal inflammation of the ear, in which the internal and external administration of narcotic remedies had not produced the least relief, morphia was injected near the mastoid process, and the pain which had been excessively violent, ceased soon afterwards, and did not return. In a case of cancer of the uterus in a woman aged 47, morphia took away the pain for two or three days, and procured sleep. In a case of violent tic-douloureux connected with convulsions of the muscles of mastication, and in which quinine and morphia had been given internally without success, one injection of morphia near the foramen mentale abolished the pain entirely. In a patient suffering from retro-peritoneal medullary cancer, the effect was also very good, and, at the request of the patient, the operation was repeated in him every two or three days until death.

The same Surgeon has recently much employed a kind of parchment paper in dressing wounds. If thick paper is drawn through diluted sulphuric acid at a certain temperature, the acid combines with the organic fibres of the paper in such a way as to change the texture of the paper, so that it becomes very firm and similar to horn: if it is afterwards moistened with water, it becomes supple, homogeneous, air-tight and waterproof. It is then perfectly neutral, indissoluble and unalterable by water or any other fluid. Dr. Scholz has used paper thus prepared to put on suppurating wounds, where he prefers it to oil-cloth and gutta-percha-paper, on account of its greater pliancy, durability and absence of smell. If the paper has been contaminated with urine, fæces, pus, blood, etc., it can again be perfectly cleaned by merely laying it in water and afterwards drying it in the open air; and if some spots should still adhere to it, a little chlorine water will take them out without damaging the paper in any way. The price of this paper is much less than that of oil-cloth, gutta-percha paper etc., and it may be used for the application of ice, for recipients of urine, for hermetic closure of anatomical preparations, etc. I regret not having mentioned this before, as it might have furnished the British Chancellor of the Exchequer with an additional argument for the abolition of the paper duty.

FRANCE.

Paris, June 2.

THE INFLUENCE OF COFFEE-HOUSES AND THEATRES UPON HEALTH.

Dr. Legrand de Saulle has recently brought under the notice of the Medical Profession a dyscratic disorder which has not yet been described, and which may be called "the dyscrasia of coffee-house visitors." It is well known that a considerable number of Frenchmen have their real home in *cafés* and *estaminets*, where they eat, drink, sleep, gamble, and often die. It is especially these *habitués* of the coffee-houses, and of course not occasional visitors, who are liable to the disease discovered by Dr. Legrand. He says that, in the first instance, the tea and coffee which are taken, the conversation, especially when it turns on political affairs, and the gambling, produce great excitement; but it is chiefly the air, which is contaminated with tobacco-smoke, the productions of the combustion of gas, and the exhalations of carbonic acid and ammonia by the visitors, which have the most pernicious effects upon the health. This is especially the case during the cold season, when all ventilation of the rooms in the coffee-houses is neglected, which are then more crowded than ever. Dr. Legrand states that he has observed three stages in the dyscrasia of coffee-house visitors:—In the first, the digestion becomes sluggish, the intestines are distended by gas, the complexion becomes pale, sleep is disturbed, and fulness of the head and morose disposition ensues. In the second stage, we find loss of appetite, strange desires, constipation, a withered aspect of the features, watering of the eyes, photophobia, weakness of the olfactory sense, diminution of sexual power, disinclination to work, and decrease of memory. In the third stage, the digestion is still more weakened, asthma comes on, the pulse is frequently intermittent, the features are distorted, the pupils dilated, vision and hearing disturbed, and impotency, irritability of the mind, fatigue, insecurity of movements, cold and numbness of the limbs are also observed. Young persons resist the evil influences of coffee-house life much longer than the old; they only begin to suffer six or eight years after having commenced this mode of living; while such as are advanced in years, and take to coffee-houses after having retired from business,—which is mostly done at a period where, generally speaking, a great disposition to plethora exists,—are much sooner affected. Officers who are garrisoned in small towns, and spend almost the whole of the day in coffee-houses, are the most numerous victims of this sort of life. During the first and second stage of the distemper, the mere retirement from *cafés* is often sufficient to re-establish health: this result is frequently seen in officers who marry about their fortieth year, and who, with a return to home-life, are entirely relieved of their sufferings. Dr. Legrand thinks that many cases of general paralysis have their origin in this unhealthy mode of life.

In a recent sitting of the Academy of Sciences, M. Bonnafort spoke of some of the inconveniences connected with the present arrangement of the stage in the Paris theatres, and their influence upon the health of the actors. In consequence of the communication of the stage with the lower story of the building by means of openings on the lamp-box at the proscenium, a strong draught is created, which is increased by the heat of the flames, and is so much the more unpleasant as it is directed just against the face and the throat of the actors and singers, and thus impairs voice and respiration. The illumination, besides being very dazzling, acts otherwise unfavourably, as it comes from below. M. Bonnafort proposes that, especially in any theatres and opera-houses to be built in future, the following modifications should be adopted:—All openings by means of which a communication between the stage and the lower story is effected should be closed, at least, during the representation; and secondly, the lamp-box on the proscenium should be placed higher up, the rays of light to be carried downwards by means of suitable reflectors, so that the stage and the actors should only have that normal illumination which is found in nature, and which is always observed by painters.

M. PAJOT ON PELVIMETRY.

M. Pajot, Professor of Obstetrical Medicine, recently made some interesting remarks on narrow pelvis, in respect to the propriety of contracting marriage when such deformity exists. This question is one of great delicacy, as the Physician, in answering it, takes upon himself the responsibility of celibacy, or of an unfavourable result of pregnancy, which may ensue. The examination in such cases ought to be made in the following manner:—At first the external appearance of the girl should be considered. Persons with a narrow pelvis are generally small, and have a peculiar physiognomical expression, which is more easily recognised than described. The person should then walk about the room, when some peculiar symptoms will strike the eye of the observer; a slight limp in the gait, or a singular movement of the legs, in consequence of which the dress is thrown backwards. Another symptom is a large head and short fingers. On inquiry it will be found that the person has suffered from rickets as a child, or that she has had the thigh fractured, or that, in her third or fourth year, dislocation of the hip has taken place in consequence of coxitis. But from all this we can only suppose, and not affirm, the existence of a narrow pelvis. The proportional length of the lower extremities is of more importance as a means of diagnosis. Whatever may be the length and the direction of the vertebral column, it is almost certain that if the thighs are crooked and very short, the pelvis is narrow; and if the legs are straight, and their length is adequate to the trunk, no such deformity exists. The measurement of the pelvis is, however, the surest means of diagnosis, although it is always connected with considerable difficulty. The pelvimetre of M. Baudelocque does not give reliable results, as the thickness of the sacrum on the symphysis are not always the same. Van Huevel's method of measuring the thickness of the sacrum separately is not easy, as the instrument cannot well be fixed on the promontorium. M. Pajot recommends the following method of examination:—The person to be examined ought to lie on her back; then the point of the

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forefinger, the radial side of which is turned towards the vertex of the arcus pubis, is introduced into the vagina towards the excavation of the sacrum, and from there upwards towards the promontorium. If this cannot be reached, the pelvis is normal; if it be reached, an impression should be made on the examining finger, at the point where it is crossed by the arcus pubis, with the nail of the other finger, and it should then be withdrawn. According to the measure procured, the length of the straight diameter of the pelvis is determined, taking care, however, to deduct from it one centimètre on account of the obliquity of the symphysis.

ACTIONS BROUGHT BY MEDICAL MEN.

In conclusion, I may mention two actions recently brought by Medical men, which have excited some interest here. The first was brought against Madame Cabel, the celebrated singer of the Opera-comique, by Dr. Grégoire, for recovery of monies due for Medical attendance from 1858 till 1861. The sum claimed was 4850 francs. The defendant pleaded, that the Doctor was not licensed to practise in France, and that he had served her merely as an agent, but not as a Physician. Witnesses, however, proved that such was not the case, and that some years previously, when Madame Cabel was quite unknown and poor, Dr. Grégoire had given her his Medical services gratuitously. The judgment therefore went for the plaintiff; but, strange to say, the fee was reduced to 1000 francs.

The second action showed the value set by a French jury on the third phalanx of a finger. A young Doctor was called to a poor widow, who was lying in a miserable attic in the seventh or eighth story of a house not in the most fashionable quarter of this metropolis. The landlord, a rude Auvergnate, had for some time threatened to turn the poor woman into the street, as she could not pay the rent, and was just on the point of fulfilling the threat when the Doctor interfered, and turned the landlord out instead. In the scuffle which ensued, the Avergnate bit off the third phalanx of the forefinger of the Doctor. When summoned into Court, the delinquent endeavoured to exculpate himself by stating that he had suddenly, and without knowing how, found the finger of the Doctor in his mouth, which thereupon had unexpectedly closed, and, in the capital condition of his (the defendant's) front teeth, a wound had unfortunately been the consequence. The Court, however, was averse to such a bold use of the theory of reflex movements, and condemned the defendant to pay 3000 francs damages.

GENERAL CORRESPONDENCE.

ON THE CONJOINT ATTENDANCE OF REGULAR AND IRREGULAR PRACTITIONERS.

LETTER FROM DR. RADCLYFFE HALL.

[To the Editor of the Medical Times and Gazette.]

SIR,—May I be allowed to make a comment on a sentence in your last week's Replies to Correspondents? You observe on the question of Consultation with Homœopaths, after stating that it is "absurd and impossible." . . . . "But there may be doubts how far we are justified in refusing aid to patients in an extremity merely because they *have been* (the italics are mine) adherents of Homœopathy." In this I think the Profession at large will agree with me that there never can exist any such doubts for an instant. We are the servants of the public, and have no right to refuse our Professional services when called for, on the score of any previous opinions or acts of the patient. This is not the point at issue on any occasion. The existing feeling of disapprobation on the part of the Profession towards those among them who attend persons previously treated by Homœopaths is restricted entirely to those who do so attend in an equivocal manner, either in consultation, or in conjunction with a Homœopath, or, at least, at the same time with a Homœopath; perhaps, even allowing the patient to take on the same day the globules of the one and the doses of the other. Towards all such the more loyal members of the Profesaion feel indignant, and, in my opinion, justly indignant. For such coquetting with a so-styled system which every disbeliever must hold in contempt, there can only be either a sordid motive or the not unamiable but weak motive of disliking the unpleasantness of hurting the feelings of the Homœopath, or of the patient's friends. The finer motives of humanity, duty to the patient, etc., are in no way involved.

A patient is a free agent. If incapacitated by his sickness from judging for himself, his friends are free agents. He or they ought to know what it is they want. If they choose to call in a regular Practitioner after a Homœopath has been in attendance, it can only be because they now prefer the services of the former. From feelings of courtesy they may not wish abruptly to discard the Homœopath. It is "unpleasant" to them to do so. But is there no higher duty incumbent upon us than to "make things pleasant" to the social feelings of our patient and his friends when by so doing we appear to the public outside to class ourselves with Homœopaths and Homœopaths with us? Can any man who feels a pride in his Profession doubt that loyalty to his Profession is a positive duty which ought to be carried out, even though it entail the exercise of the same firmness of conduct which proper self-respect also entails? Our personal duties are threefold: to our patient, if he desire our services; to ourselves, in maintaining our self-respect; to our Profession, in maintaining not only in reality, but in appearance to the world, its purity and spotlessness from irregular practice. I contend that the three are in every instance compatible.

When called in to a patient attended by a Homœopath, a Medical man can always say with sufficient courtesy, "My services are at your disposal if you desire them, but only on condition that during my period of attendance the Homœopathist entirely retires from visiting the patient: we believe nothing in common in Medical matters, and, therefore, cannot in any case act in conjunction with benefit to the patient." If this be objected to, let the Medical man himself decline to attend; or, if already in the house, let him decline to see the patient in the presence of the Homœopath, to hold any Medical converse with the Homœopath, or in any way to recognise him as a brother member of the Profession. By thus acting firmly on every occasion, the decision rests, as it should rest, with the patient; and if the patient decides not to forego the attendance of the Homœopathist for the time being, the Medical man has not to blame himself for withholding his services. Practically this does not occur. If called in after the Homœopath, by proper firmness the Medical man can both yield his services and maintain his position and that of his Profession at the same time. But we are asked,—Are we to let the patient err in his ignorance when we have a chance of doing him good, etc.? We are not responsible for the acts of others, only for our own. Otherwise, in a case of serious illness, when irregular Practitioners are called in because Medical men have little hope to give, we should refuse to go away, and insist, against the will of the patient, in continuing our attendance and ministrations. This is merely the converse of the other suggestion, and yet to what exclamations against interfering with the liberty of the subject, etc., would it not give rise! So far as I can see, the rule may be made absolute,—that it is the duty of every Medical man to his patient, to himself, and to his Profession that he never consents even to *appear* to attend a case in conjunction with an irregular Practitioner, whether Homœopathic or any other. Let one or other always retire, and let the patient or the patient's friends decide which.

I am, &c.

Plymswood House, Torquay, June 8. C. RADCLYFFE HALL.

CONSULTATIONS WITH HOMŒOPATHS.

[To the Editor of the Medical Times and Gazette.]

SIR,—As one of the earliest subscribers to the *Medical Times and Gazette*, I must request you to afford space for a few remarks on your leading article, entitled "Ethics *versus* Etiquette," in the last number of your valuable periodical. I admire the temperate and fair spirit in which you have expressed your opinions upon the subject; but I fear they will be deemed by many of your readers as too strongly apologetic of consultations with Homœopaths. I allude more especially to your strictures upon the proceedings of the Manchester Medico-Ethical Association in connexion with Mr. Roberton, one of its Vice-Presidents. With

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respect to the printed circular, sent by the Messrs. Braithwaite, of Leeds, to their old patients, I think there are few Practitioners who would approve of their "good taste" in the matter; but in so doing they have not been guilty of any breach of Medical ethics. The Manchester case, however, as you justly observe, "is one of greater difficulty and importance than that of Leeds."

Most heartily do I join in all you have said of Mr. Roberton as a writer on Obstetrics; and I may add that he has not confined his labours to that branch of Medicine alone, as is shown by several valuable papers published in different periodicals, and in the *Transactions* of the Statistical Society of this city. I will venture to say there is not one member of the Manchester Medico-Ethical Association, who has not a high respect for Mr. Roberton's personal and moral character; and, hence, I believe that its Committee, in the steps they have taken in this unpleasant affair, have not been influenced by any unkind or vindictive feelings towards that gentleman, but by a supposed sense of duty. It will probably occur to you, as it has to me, that the more elevated Mr. Roberton's Professional position, and holding as he did the office of Vice-President, the more incumbent was it on the Committee to notice any infringement, on his part, of a fundamental rule of the Association, of which he must have been fully cognizant. You are wrong in supposing that "excommunication" was the sentence passed upon Mr. Roberton; for, as far as I can learn, that gentleman on receiving a note from the Honorary Secretaries requesting his attendance at a meeting summoned for the purpose of investigating the circumstances of his consultation with a Homœopath, immediately sent in his resignation of membership, which, though not at first, was afterwards accepted; expulsion being the only alternative, and according to a rule of the Association, this step would have prevented any of its members from ever again meeting Mr. Roberton in consultation. It is well for the existence of the Society that the Committee did not propose the latter measure, because it would surely have led to the resignation of some of its oldest and most influential members, who would not have consented to a separation of their professional intercourse with Mr. Roberton. To my mind, the publication of the "correspondence" in the leading Medical periodicals was uncalled for, as an explanatory circular sent to each member would have answered every purpose, and shown more consideration for Mr. Roberton's feelings. I cannot admit the soundness of your reasoning upon the circumstances which would justify consultations with Homœopaths (a). You remark, "Suppose that the wife or daughter of a Physician chose to consult a Homœopath in a dangerous illness, is he to stand utterly aloof, and not interpose one word of counsel or remonstrance?" I reply, Certainly, his first duty would be to prevent it; for you allow that "as to Medical treatment, the consultation would be useless." You further observe, "We will suppose, for argument's sake, the Homœopathic Practitioner to be the very worst of the class. Mr. Roberton, in the first instance, refuses to meet him. The husband persists in his wish that the Homœopath should continue. Query: Is Mr. Roberton absolutely to abandon his old patient and relative in her extremity to the obstinacy of the husband and the irrational dogmas of Homœopathy?" Now, although Mr. Roberton was, no doubt, placed in a very delicate and trying situation, still, in my humble opinion, his proper course of action was clear. It was scarcely possible for him or any other Practitioner to have avoided the first consultation, but it was an error in judgment on his part to repeat them. As the Homœopath's presence, as far as remedial measures were concerned, was of no avail, Mr. Roberton would have done well to resist the ignorant obstinacy of the husband by firmly insisting upon the retirement of the Homœopath. In not thus acting, Mr. Roberton seems to me to have lacked moral courage and a due sense of self-respect. Young Practitioners who have to earn their daily bread, and sacrifice both connexion and profit by withstanding the numerous inducements to consultations with globulists, are unfairly treated if the seniors in the Profession do not set them examples of unflinching opposition to charlatanism, under whatever form it may appear. I deeply lament that Mr. Roberton's name should have been so painfully brought before the Medical public, but it is a satisfaction to feel that his reputation remains unsullied. A more honourable and upright member the Profession does not possess.

I am, &c.

Manchester, June 9. An Old Subscriber.

(a) Our correspondent is in error. We never justified "consultations with Homœopaths." We have always spoken of them as absurd and impossible. What we protest against is the over refinement of men who will not interfere to save a patient who may be placing dangerous confidence in the globulists.—Ed.

CHLORATE OF POTASH IN CONSUMPTION.

Letter from Dr. Guy.

[To the Editor of the Medical Times and Gazette.]

Sir,—Always on the look out for the hints invariably disseminated in your invaluable columns, which I look upon as a Magazine of Remarks, my Mentor was startled by the alleged properties and doses of chlorate of potash and sugar in phthisis, a disease unfortunately so frequent and so fatal, that all practical men in the endeavour to soothe it have been distracted by the multiplicity of means reported as efficacious, if not in curing, in retarding the inexorable doom of its victims.

If we have now a saline and a saccharine combination that can relieve it so rapidly as instanced in the "hurried jottings" of Dr. Turle, his discovery would be but poorly requited, by his statue being erected in Trafalgar-square, and handed down to an admiring posterity as the effigy of the benefactor of the human race, who had caused the hearts of parents to glow, their eyes to glisten, and their tongues to syllable pæans in his praise, for successfully combating so dire a disease. But unfortunately cases of mis-named disease are reported cured, when the so-called disease never existed.

The imperfection of Medical knowledge is so painful, that could we internally explore what we fancy a fortress of demonstration, we should be astounded at our misconceptions: few Practitioners being free from imaginary cases of phthisis. I have frequently had patients with cough, expectoration of puriform mattor, night sweats, and diarrhœa, in a word, all the symptoms of phthisis, and they recovered. Dilatation of the bronchi, combined with many forms of chronic bronchitis, may be mistaken for phthisis, however good an ear a man may have for the stethoscope.

Congratulations are, however, due to Dr. Turle on his altogether unparalleled success, not only for finding out a remedy, but keeping his patients so long from the grasp of the grave, to say nothing of the flattering but strange request of his patient, who from being extremely emaciated, begged to be allowed to discontinue the sugar, etc., for fear of becoming too fat!

"Hurried jottings" are, however, generally imperfect, doubtful, and fallacious. Now, a word of caution about chlorate of potash, which I regard as an invaluable drug, in moderate doses, in many kinds of morbid irritability of the stomach, and as an efficacious medicinal stimulant in low fevers, etc. In one of the late American journals I read of a stout, healthy man, who was poisoned by taking ʒiv. daily for a short time; so that, however admirable as an introducer of oxygen into the system in small doses, there can be no doubt whatever of the danger of administering wholesale doses, upon a crude hypothesis or a limited experience. And as for sugar taken to the extent of pounds weight, I fear that, if it could be borne, a very short experience would prove it very deleterious by destroying the tone of the stomach, creating unquenchable thirst, and feverishness. It appears to me, too, that the combination of the two remedies counteract each other, and would be equivalent to blowing hot and cold to produce an effect.

I am, &c.

London, June 6. A. Guy, M.D.

Rents of Professional Residences in Paris.—The Medical Profession is one which feels most severely the effects of the present rage in Paris for demolishing and rebuilding houses at enormously increased rents. The Editor of the *Union Médicale* declares it as a fact that the rent which a Medical man has to pay in Paris now averages from £80 to £120 per annum, while the average income of Practitioners in that capital does not exceed £240.

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REPORTS OF SOCIETIES.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, JUNE 5, 1861.

DR. TYLER SMITH, President, in the Chair.

CASE OF SMALL-POX IN TWIN FŒTUSES.

Dr. MADGE exhibited for Dr. Graves two fœtuses born prematurely at about the sixth month. On the body of one fœtus there were about sixty-five small-pox pustules; on the other, six only. Two months before delivery the mother had had discreet small-pox; she had been vaccinated.

Dr. GIBB related the particulars of some analogous cases.

Dr. HALL DAVIS exhibited

AN HYDATID MOLE ACCOMPANYING A HEALTHY OVUM OF SIX MONTHS' GESTATION IN A TWIN CONCEPTION.

It was a well-marked specimen of an hydatid mole, about a pint and a-half in bulk, discharged from the uterus seven hours after the delivery of a living child and its healthy placenta. Labour had been prematurely induced in consequence of exhausting hæmorrhage. No trace of the second embryo was discovered, but there was, he thought, no doubt that there had been a twin conception. He had found two similar cases only on record.

Dr. GRAILY HEWITT made a communication

ON UNUSUAL ELONGATION ON THE FŒTAL HEAD AS A CAUSE OF DIFFICULTY IN THE APPLICATION OF THE ORDINARY OBSTETRIC FORCEPS,

giving a description of a modified form of instrument to be used in such cases. The object of this communication was to direct attention to the occasional occurrence of difficulty in the application of the ordinary English forceps, produced by excessive elongation of the fœtal head during labour, and to insist on the necessity for using an instrument adapted by its form and size to the shape of the head in these exceptional cases. The Author's attention had been directed to the subject by the fact, that in a particular case in which it was judged advisable to use the ordinary short forceps a difficulty was experienced in applying them. After the labour had been subsequently completed, the head of the child, compressed and moulded to the shape of a narrow and unyielding parturient canal, was found to be unusually elongated in the occipito-mental diameter. The head measured in this diameter six inches, half an hour after birth. The actual size of the head was not anything remarkable. The kind of alteration in shape here noticed was such as is frequently observed in primiparæ; but the Author had never had occasion before to notice such elongation in a case where the forceps was required. The difficulty experienced in applying the forceps was due to the fact, that the side of the head presented, owing to its elongation, a curve different to that ordinarily present, and the blade of the forceps used was not long enough, while, at the same time, it was too sharply curved to meet the requirements of the case. The occipito-mental diameter of the head, with which we are chiefly concerned in reference to the applicability of the forceps, measures, according to various obstetric authorities, from 4½ in. to 5½ in. Van Pelt, who has recently published the results of his measurements in 700 cases, found the average to be 5 1/10 in. These measurements were made, not immediately after the escape of the head, but when sufficient opportunity had been given to the head to recover from the effects of compression during the parturitive act. No observations had hitherto been made for the purpose of ascertaining the difference between the measurement of the occipito-mental diameter during parturition and at a period a few hours after the head had been born. The difference in question was known, however, practically to be considerable. The relations subsisting between the curve and length of the blades in the ordinary forceps and the shape and curve of the head in ordinary cases and in cases of undue elongation, were next alluded to, and illustrated by means of drawings. Thus it was made evident,—1. That the ovoid presented by the head (as it is in ordinary cases) is such that the ordinary forceps, with a length of blade of from 6½ in. to 7 in., and a curve the arc of a circle of from 10 in. to 11 in., is admirably adapted to it. 2. That when the ovoid exceeds 5½ in. in its long diameter, the forceps in question is likely to be inapplicable, and, as in the case alluded to, difficulty might arise in endeavouring to apply it. How often would such exceptional elongation be observed in practice? In Van Pelt's cases there were 28 out of 646 in which, some little time after the end of the labour, the long diameter measured 5½ in. Hence in about 3 per cent. of all cases we may expect to find the head so long as to give rise to the difficulty in question, and this not taking into consideration cases in which there may be undue elongation, and a less degree of difficulty in cases where the head is of medium size, but yet unusually elongated. The Author believed that the difficulty alluded to had been (how frequently it was impossible to say) encountered in practice by others, though not recognised. To those who would object that, admitting the possibility of the difficulty occurring, it must yet occur very rarely, he would reply that, admitting the rarity of the occurrence in question, it was extremely desirable that it should be recognised, and that this or any other misconception likely to arise in connexion with the use of so important an instrument as the forceps should be removed. The only modification in the forceps hitherto admitted or insisted upon had reference to the position of the head in the parturient passage. No modification having reference to the shape of the head had as yet been insisted on. The latter principle was the one he wished to see adopted. The Author exhibited to the Society an instrument constructed under his directions, the blade of which was 8 in. long (instead of 6½in. or 7 in.), the curve that of a circle of 14 in. (instead of 10 in. or 11 in.), and identical in other respects with the ordinary short forceps used in this country. The curve more nearly approached that of the French instrument. The instrument thus modified would, he believed, be found applicable in the class of cases now under consideration—those in which the fœtal head is unduly lengthened. The cases requiring it would *be easily* recognised: the blade of the forceps used as a probe would inform the operator whether the shape of the head required one or the other instrument. The ordinary instrument used in this country was perfectly adapted to all ordinary cases, and it was only a further development of the principle on which that instrument was constructed to insist on the necessity for occasionally employing a forceps of which the blades were by their length and shape suited to the altered length and shape of the fœtal head. In the long, tedious labours of primiparæ the new instrument would be most likely to be called into requisition. Dr. Graily Hewitt at the same time brought forward one of the original Chamberlen forceps in the possession of the Royal Medical and Chirurgical Society, and which, by the courtesy of the Council of that Society, he had been allowed to exhibit this evening, in order to afford the Fellows an opportunity of comparing it with the instrument in ordinary use, and with the modified form of forceps now suggested.

Dr. BARNES observed, that it might be supposed that there was not much more to say upon the construction of the forceps. The forceps had exercised the ingenuity of more men than, perhaps, any other instrument, and certainly the literature upon this subject was more extensive. With reference to the measurements of Van Pelt and others, it was important to bear in mind that the dimensions of the fœtal head were very much a question of race. The American child's head was not of the same size as the English or the French child's; and if anyone desired to see heads developed in the most magnificent proportions, he should go to Ireland. It would not do, therefore, to take the fœtal measurements of one race and apply them to the obstetric theories of another. He (Dr. Barnes) had encountered the practical difficulty signalised by Dr. Graily Hewitt, but had not met it in the same way. At one time he was in the habit of using the Dublin straight forceps, which is somewhat longer than the one described by Dr. Hewitt as being in ordinary use in England. This instrument he had now abandoned; it was apt to split the perinæum. This objection he thought applied to all straight short forceps. To introduce this instrument, it was necessary to press the handles far back, stretching the perinæum backwards, and then during extraction, as the bow of the blades sprang directly from the handles, a great strain upon the perinæum was unavoidable. For some years

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past, he had used exclusively the forceps of Mr. Roberton, of Manchester. Being called upon frequently to apply the forceps, he was able to say that this instrument was admirably adapted to all the ordinary emergencies, whether the head lay at the brim, in the cavity, or near the outlet. The pelvic curve, the length of the blades, and the length of the shank, kept the perinæum free from any strain whatever beyond what was incidental to the passage of the head itself. The instrument added nothing to the danger to the soft parts. He wished to add, that it was not a fair representation of the application of the forceps to show it as embracing the head with perfect symmetry. The grasp was oblique, one blade lying on the right brow or temple, the other on the occiput or behind the line of the transverse diameter. This was the necessary consequence of the circumstance that the long forceps was introduced in the transverse dismeter of the pelvis, and not with reference to the child's head. This he thought an important rule to follow. In some cases, with the head low in the pelvis, it might be possible to apply the short forceps with a blade on either parietal bone; but it was a bad practice. The pelvis should be the guide for the position of the forceps, not the head.

Dr. Braxton Hicks asked if Dr. Graily Hewitt had tried the long curved forceps in the case he had recited; because in a case of like nature to which he was called there was similar difficulty in applying the short straight forceps; it was found impossible to bring them forward enough to lock, by reason of the pressure of the head against the brim in front of transverse diameter. Upon employing the long curved forceps, the end of the blade passed above the obstruction from behind, and then, using moderate compression, the head descended. He alluded also to the value of a very loose lock in cases where the blades of the forceps could not be brought opposite one another.

Dr. Tyler Smith thought there could be little doubt that in difficult labour with great elongation of the head the modification of the forceps now proposed would be found useful. He had for many years used an instrument about an inch longer in the blade than the ordinary short forceps, its great advantage being that the lock could always be kept outside the soft parts of the mother.

Dr. Graily Hewitt, in reply, said that it was satisfactory to him to find that the difficulty he had alluded to had been experienced by others. The object of the paper was to establish what had not yet been established in obstetric practice—viz., the principle of the necessity for adapting the shape and length of the blades to the varying shape and curve of the fœtal head. With respect to the particular instrument exhibited to the Society, which was intended for cases of excessive elongation, it was quite possible that by some it might be considered to be still further improvable by the addition of the pelvic curve; but he believed the straight form which it now possessed was the best, and it was, moreover, very desirable to complicate the instrument as little as possible. In the particular case related he had not attempted to use the long curved forceps. He would remark, that the long curved forceps was no more fitted for dealing with such emergencies as those contemplated than the ordinary short ones, for in both of the instruments in question the length of the blade itself was identical.

(To be continued.)

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, May 28, 1861.

Dr. Babington, President, in the Chair.

A Paper, by Mr. Henry Lee, was read on

SOME EFFECTS OF REFLEX NERVOUS IRRITATION PRODUCED BY SYPHILITIC DISEASE OF THE BONES OF THE SKULL.

This paper was a continuation of one which the Author presented to the Society during the last session. The particulars of three cases were then related, in which extensive and persistent ulcerations had occurred in different parts of the body. These ulcerations were accompanied, in the first case, with deafness and impaired voluntary power; in the second, with fits of long-continued spasm of some of the muscles of the face and body; and in the third, with delirium and coma. In one case the ulceration had existed for a period of six years, and had destroyed the left eye and the left nostril; and in another the ulceration had continued for a period of eight years, and had involved the whole of the skin of the right arm. In addition to the above cases, the author referred to two other instances in which disease of the bones of the skull had produced marked nervous symptoms; and in one of these persistent and long-continued ulcerations had been present. The Author remarked that a state of chronic spasm may be produced in blood-vessels as well as in muscles by nervous irritation; and the post-mortem examination of two of the above cases showed the irritation to have originated in the bones of the skull at a distance from the origin of any of the motor nerves, and he therefore concluded that, as the parts at the base of the brain were healthy, the nervous irritation (shown in different ways in different cases) depended upon reflex action. The same action which would produce spasm of the muscles at one time might produce spasm of the blood-vessels at another, and thus interfere with the process of nutrition. To this cause the author attributed the ulcerations in the above-named cases. The details of two post-mortem examinations were particularly insisted upon. In both of these, the inner table of the skull had been extensively diseased, and had been the cause of disease of the dura mater. In both cases the parts at the base of the brain were entirely free from disease; and it was particularly noticed that in those situations where the diseased internal table had been removed (in one case artificially), the membranes of the brain were healthy; but in those parts where the diseased bones remained, that the membranes were also diseased. The conclusion drawn by the Author was, that where portions of bone were exposed by disease, the external and middle tables might be removed by the trephine without any danger; and that where the internal table was diseased, and the locality of that disease was indicated, which it might be, by the exposed external table, then the whole thickness of the skull might be removed by the trephine. This operation of removing the whole thickness of the skull had been performed by the Author now in six cases. In three of these, the symptoms for which the operation was performed were decidedly relieved; in two, there was less decided benefit; and in none did the operation cause any fresh complications. In five out of these six cases, the external table was denuded and diseased, and served as a guide to the exact locality of the disease of the internal table. The following case was related by the Author, the patient having been sent to him by Dr. Edmunds, of Spital-square, a few hours only before the meeting of the Society:—A man, aged 25, had an indurated chancre four years ago. He was not attended at the time by any Surgeon; but was subsequently treated, but without attending regularly, by iodide of potassium. He took no mercury until after the appearance of the following symptoms:—Eighteen months ago a large swelling appeared over the left parietal bone. This was accompanied by considerable pain. In September last he was "took all at once" with a kind of fit, which lasted an hour. After this had subsided, the pain in the head continued for a considerable period, worse than before. During this fit he lost his senses; but he has had several fits since, and has always retained his consciousness. The fits begin with a kind of "trembling pain" in the left shoulder, and this sensation gradually extends down to the tips of his fingers. The muscles in the hand and arm become quite stiff. After about a quarter of an hour the fit ceases, and leaves a dreadful "heavy pain" in the head, particularly at the top. This pain sometimes lasts for two or three days, and during its continuance he feels a great inclination to press the top of his head against something hard. After the last fit this pain continued for a week. When the fits occur, he is conscious of what is going on, but "feels staggering," with a continued inclination, if on his legs, to press forward. Can speak during the fits, but feels little disposition to do so. He never passes more than a month or five weeks without being in bed for two or three days with pain in the head. On one occasion he had "cramp in the lower jaw," and "felt as if the skin was set." Before the pain comes on he hears a noise in his ears like the tramping of soldiers. He can place his finger upon the spot where he feels most pain,—at the

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upper part of the parietal bone, a little to the left side. He remembers having had five distinct fits independent of the periodical attacks of pain. During the occurrence of these fits the fingers of the left hand turn pale, and remain so for two or three hours. None of the other limbs are ever affected. The Author remarked that in this case, as in those to which he had referred in his paper, there was, during the occurrence of the fits, an affection of the muscles of one particular limb and of the blood-vessels of the same part, as indicated by the bloodless condition of the skin. The seat of disease, as indicated by the pain, was at the top of the head, and unconnected with the origin of any motor nerves; and he, therefore, concluded that this, like the other cases contained in the paper, was an instance in which irritation of the dura mater by disease of the bone had, by reflex action, produced the symptoms which had been described.

Dr. Edmunds stated that the last case to which Mr. Lee had referred had come under his care. The patient had originally been the subject of Hunterian chancre, and had come to him afterwards for swelling of the glands, for which he had prescribed iodide of potassium. He had subsequently presented himself with a painful swelling of the parietal bone, bursa, tibia, &c. Twelve months afterwards fits came on.

At the conclusion of the meeting, Dr. Nelson exhibited to the Society an Inhaler, recently invented by himself; its claims to the notice of the Fellows being,—great ease and simplicity of action; perfect cleanliness; and an arrangement of the mouth-piece by which is secured economy in the use of any medicated ingredient that may be required for inhalation.

LEGAL INTELLIGENCE.

COURT OF QUEEN'S BENCH, DUBLIN.

The Queen *v.* The Medical Council in Ireland.

Judgment has at length been given in the Court of Queen's Bench in Dublin, in the case of the Queen *v.* the Medical Council in Ireland, but without formally settling, although it virtually settles, the question which it was expected would have been authoritatively decided, that namely, of the alleged right of the King and Queen's College of Physicians to grant the degree of Doctor of Medicine. It is unnecessary here to repeat the circumstances of the case which we have already briefly stated.—(Pp. 498 and 581.) Judgment was delivered by the Lord Chief Justice (Lefroy). The Court were unanimously of opinion that the application requiring the Registrar to attach the title of M.D., or Doctor of Medicine, to the name of Mr. Barker, could not be complied with, and that the cause shown against the conditional order should be allowed. They thought that, consistently with the Act of Parliament under which the application was made, a compliance with the order would be to set aside what was clearly its legal construction. "The Act of Parliament," continued the Chief Justice, "under consideration, the 21st and 22nd of the Queen, was deserving of what, with all deference to the Legislature, he might say was a rare compliment, namely, that it had been drawn with peculiar accuracy and care." Having given a sketch of the Act, and detailed the qualifications described in schedule A, the Chief Justice proceeded to observe that a marked distinction was thus taken between Medical men holding a degree from an University, and the Licentiate of a Medical Corporation. The question arose whether in the present case any of these qualifications had been laid before the Court. The applicant, Mr. James Barker, jun., had a diploma from the College of Physicians, but that was not any of the qualifications mentioned in the schedule entitling him to be registered as a Doctor of Medicine. A licence and a degree from an University are mentioned, and this gentleman having only a diploma or licence to practise Medicine generally, and not a degree from an University, was not entitled to be entered on the Register as a Doctor of Medicine, not having brought himself within the qualification mentioned in the schedule. The circumstance that he was popularly treated and regarded as a Doctor is not enough. What he desired was to be regarded as a Licentiate of the College of Physicians, and as a Medical Doctor, and there was no such privilege given by the schedule to a mere Licentiate. He contended that there was a diploma which entitled him to what he sought; but suppose there was, and suppose that the College of Physicians had a right to grant a degree of Doctor of Medicine, they had not granted it. He had brought forward no document showing that he possessed the qualification required by the Act, and had, therefore, a right to the privilege he sought of being registered as a Doctor of Medicine as well as a Licentiate. But, even though he had the diploma he spoke of, and that the College had a right to grant it, it would not entitle him to have the order made, because the Act of Parliament was peremptory. Unless the document produced to the Registrar, or to that Court, had on the face of it some one of the qualifications mentioned in the schedule entitling the party to the degree, it could not be acted on by either for the purpose required. The Court could not make for the applicant an Act of Parliament, or travel out of the Act now in force. They were bound by it. He was bound by it. The registrar was bound by it, and the Council were bound by it. It specially provided that no person should be registered under the Act unless according to the document of qualification, which document must show some one or more of the qualifications mentioned in the schedule, and there were words in the Act negativing all other titles whatsoever. The applicant had failed to show primary qualification as a Doctor of Medicine, by virtue of a degree, and a mere titular qualification would not do. It was not necessary for the Court to pronounce any judgment as to the power of the King and Queen's College of Physicians to grant degrees. They had not given a degree of Doctor of Medicine in this instance, and therefore it was not necessary to introduce into this case any decision on that subject. Whatever impression they might have upon the subject, the case did not turn upon that, and therefore the question was not to be considered as concluded by anything that passed in the present case. It was rather an incidental than a primary part of the subject. For the reasons already stated, the cause shown against the conditional order should be allowed.

Mr. Justice Hayes and Mr. Justice Fitzgerald severally delivered judgment to a like effect. In the course of his observations Mr. Justice Fitzgerald stated that for himself, and as one of the public, he thought that the matter contended for was shadowy in the extreme. The reason that Mr. Barker, who is a Licentiate of the King and Queen's College of Physicians, pressed this case, was stated to be lest the public might be misled as to his qualification by the omission of the letters "M.D." from the Register; and he (Mr. Justice Fitzgerald) considered that there could not be a better or a higher qualification in the estimation of the public than that possessed by the applicant—the testimonial of the King and Queen's College of Physicians that, having been examined, tried, and approved by that learned body, he had received their testimonial that he was a learned and well qualified person, and therefore licensed to exercise and practise the faculty of Medicine. In his opinion that was a testimonial of the highest degree, showing that he was a person well qualified and entitled to practise. His (Mr. Justice Fitzgerald's) judgment in the case was founded on the Act of Parliament, and on that alone.

The cause shown was allowed, but without costs, the question raised being a novel and important one.

OBITUARY.

DR. SMITH, OF MOFFAT.

To the great grief of the inhabitants of Moffat and Upper Annandale, this much-esteemed Physician died on the 3rd inst. at the age of seventy-two. Dr. Smith had resided as Physician in Dumfriesshire for forty-five years, and there is one universal feeling of great sorrow that he has gone. The Doctor was remarkable for a rare combination of professional energy and skill, conscientiousness, benevolence, and humour, which made him a man of sterling value to society, and a racy and cheerful companion. He entered the Royal Navy as Surgeon in 1804, and continued in it till 1816. During the war-period he saw a good deal of service in various quarters of the world, and he did not come on shore till he saw Napoleon deliver himself up on board the *Bellerophon* in the Channel, where Dr. Smith happened to be at the time. The Doctor

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used to give a very graphic description of Napoleon's appearance on deck, and his astonishment and admiration when he saw how the British sailors obeyed their officers and handled the ship. It seemed quite to console the fallen hero. "Only look at these fellows," said he to General Bertrand, who stood beside him, "how would it ever have been possible to beat them?" When Dr. Smith left the sea, he settled in his native vale of Lower Annandale, and two years after he fixed his head quarters at Moffat, where he remained till his death.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—At the Comitia Majora held on Monday, June 10, the following gentlemen, having undergone the necessary Examination, and satisfied the College of their proficiency in the Science and Practice of Medicine and Midwifery, were duly admitted to practise Physic as Licentiates of the College:—

Alexander, Edward William, Doughty-street, Mecklenburgh-square
Bell, James Vincent, St. Thomas's Hospital.
Braine, Francis Woodhouse, Cork-street.
Campbell, Francis Wayland, M.D., Montreal, Canada
Dixon, John, M.D., Bermondsey
Dudfield, Thomas Orme, M.D., Thurloe-place, Lower Norwood
Hoffmeister, William Carter, M.D., Cowes, Isle of Wight
Hubbard, Henry W., St. Peter's Lodge, Kensington-park-gardens
Leeson, Frederick Joseph, Chester Infirmary
Marsdin, Frederick, Stainforth, Doncaster
Popjoy, Joshua Joseph Bird, Accrington, Lancashire
Powell, William Mark, Devonshire-place, Wandsworth-road
Smith, Thomas, Bredbury, Stockport
Tanner, Mark Batt, M.D., H.M. Hospital-ship *Dreadnought*
Williams, Samuel White Duckworth, Gloucester

The last-named gentleman passed the first part of the Professional Examination on May 31, together with the following:

Stevenson, Thomas, Guy's Hospital
Walford, Walter Gilson, St. George's Hospital

At the Comitia Majora held on the same day, the following Bye-law was passed for the first time, and will be again submitted to the Fellows, on the 25th inst., for confirmation:—"Any Candidate for the College Licence who has already obtained the Degree of Doctor or Bachelor in Medicine at an University, after a course of study and an examination satisfactory to the examiners, shall be exempt from all parts of the examinations hereinbefore described, except such as relate to the Principles and Practice of Medicine and Midwifery."

ROYAL COLLEGE OF SURGEONS OF ENGLAND (a).—The following Members of the College, having undergone the necessary Examinations, were admitted Fellows of the College at the last Meeting of the Council, viz.:—

Name.	Place.	Date of Diploma.
Couper, J.	Finsbury-circus	November 4, 1859
Drysdale, C. R.	Southampton-row	May 7, 1858
Gant, F. G.	Grenville-st., Brunswick-sq.	May 18, 1849
Hickman, W.	Alfred-street, Bedford-square	June 25, 1858
Jones, P. S.	Sydney, Australia	October 29, 1858
Michael, D.	United Hospital, Bath	April 6, 1857
Nayler, G.	the Barracks, Warley, Essex	June 4, 1852
Wildbore, D. H. G.	Charlotte-street, Fitzroy-sq.	July 31, 1848.

(a) This College is the only one which does not send lists of New Members to the Medical Journals.—Hence frequent mistakes, for which the Journals are not responsible.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise on May 30th and June 6th:—

Baines, William, Elham, Canterbury
Beck, William Reginald, Keighley, Yorkshire
Crawford, Cooper Hayes, Stafford General Infirmary
Garner, Robert C., Stoke, Staffordshire
Hughes, William Hugh, Warrington, Lancashire
Humphreys, Matthew Hale, Cheltenham
Hunstone, George, Broughton, Manchester
Lanchester, Henry Thomas, Norwich
Leach, Abraham, Waterhead Mill, Oldham
Martin, Thomas, Little Hutton, Lancashire
Pocklington, Evelyn, Walesby, Notts
Rew, James, Exeter
Scott, Nathaniel Gilbert, Wappinham, Notts
Smith, Thomas, Bredbury, Stockport
Waller, Charles Beaumont
Webb, John Wesley, Abersychan
Welch, Charles Henry, Cambray-villa, Clapton
Williams, Samuel White Duckworth, Gloucester.

The following gentlemen also on June 6th passed their First Examination:—

Connon, William, Gateshead
Jones, Walter, Birmingham.

APPOINTMENT.

INGLIS.—Alexander M. Inglis, M.D. Edin., L.R.C.S. Edin., has been elected Physician to the Worcester General Infirmary, in the room of Sir Charles Hastings, resigned.

DEATHS.

FOX.—June 5, Leopold Beharrell Fox, of Wilton-road, Park-road, Dalston, M.R.C.S. Eng., L.S.A., aged 42. He was for many years attached to the Apothecaries' Department, St. Bartholomew's Hospital.

JACKSON.—April 23, at Calcutta, William Jackson, Assistant-Surgeon (9th Nov., 1857), in the 80th Regiment of Foot, or Staffordshire Volunteers, aged 28.

JOHNSON.—March 11, of bronchitis, at Port Natal, Cape of Good Hope, W. J. Johnson, M.R.C.S. Eng., aged 25.

RILLIET.—Practical Medicine has sustained a great loss in the person of Dr. Rilliet, of Geneva, who has just died suddenly, amidst what appeared to be the most robust health. The well known treatise on "Diseases of Children," written in connexion with M. Barthez, will long remain the classical work upon the subject.

SMITH.—June 3, at Moffat, George Smith, Surgeon R.N. on the Retired List, (seniority February 9, 1810,) aged 73.

TADDEI.—Professor Taddei, one of the most distinguished among the Italian Physicians, has just died at Florence.

WALLACE.—May 30, at Scallanstown House, County Meath, William H. N. Wallace, Student in Arts and Medicine Trin. Coll. Dub., eldest son of Dr. Wallace, of Trim.

THE CHLOROFORM CONTROVERSY.—In reply to the Circular of the Committee at Boston in America, as to the alleged immunity from danger of ether over chloroform, Dr. Kidd has sent the Secretary the particulars of 36 deaths from inhalation of ether, 2 from inhalation of nitric ether, and 2 from amylene. Dr. Kidd still holds, however, with M. Trousseau, that ether is one-third more safe than chloroform as an anæsthetic.

HINTS FOR EMERGENCIES.—It not unfrequently happens that the carriage of "stretchers" for the wounded has been overlooked, and it becomes necessary for the Medical officer to have their places supplied by some apparatus which may be constructed on the spot. We know of no contrivance, says the *American Medicol Times*, which equals in simplicity and efficiency that which has been so frequently resorted to by the Surgeons on the frontier. Two poles about ten feet long, and of sufficient strength (such as can readily be procured in any ordinary woods) may be placed on the ground, one along each side of a blanket. Then roll the poles towards each other, at the same time rolling up the blanket upon them, secure the blanket to the poles when they have been wound up in it sufficiently near to each other to give the litter, thus made, a proper width. The sides of the blanket having been in this way wrapped around the poles, can be fastened strongly even with common twine, by puncturing the woollen fabric at intervals of a foot, along the inner sides of the poles. Pass cords through, and tie tightly, so that the knots are on the outside of the poles. In cases of secondary hæmorrhage or of violent bleeding from a wound, when the circumstances of the case call for the ligature of a large artery at some point remote from the injury—for example, where it is thought best to tie the femoral artery at the point of selection below Poupart's ligament, rather than search for the bleeding point nearer the knee—it sometimes happens that no aneurism needle is at hand:—a sufficiently good instrument for the purpose can be made by taking a common "darning needle" or "sail-maker's needle," and after heating its "eyed" end, bend it to a proper shape. By driving the pointed end into a small piece of soft wood or a corn-cob, a very good handle is made.

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·822 in.
Mean temperature	53·3
Highest point of thermometer	66·8
Lowest point of thermometer	46·5
Mean dew-point temperature	47·9
General direction of wind	N. & N.E.
Whole amount of rain in the week	0·34 in.

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VITAL STATISTICS OF LONDON.

Week ending Saturday, June 8, 1861.

BIRTHS.

Births of Boys, 963; Girls, 884; Total, 1847.
Average of 10 corresponding weeks, 1851–60, 1593·7.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	566	535	1101
Average of the ten years 1851–60	512·1	481·4	993·5
Average corrected to increased population..	..	..	1093
Deaths of people above 90	..	1	1
Deaths in 15 General Hospitals	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West'.. ..	463,269	..	4	6	1	11	3	5
North ..	618,181	1	4	5	3	16	7	3
Central ..	377,794	..	2	1	3	10	5	2
East	570,898	..	5	5	..	15	9	3
South ..	772,892	3	2	14	2	20	8	2
Total.. ..	2,803,034	4	17	31	9	72	32	14

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NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Quidam.—We have not heard.

Mr. Lowndes's case of Somnambulism shall appear next week.

Mr. Wray must register. The office is at 37, Soho-square.

Dr. Cameron's paper shall appear as soon as possible. We think our contemporary ought, in common fairness, to have admitted Dr. Cameron's reply to Mr. Pemberton.

Dr. Williams's valuable paper on the Sputum shall be inserted as soon as possible. But papers by Dr. Robert Lee. Dr. Peacock, Mr. Bulley, and several other correspondents have been waiting some time for insertion and naturally claim precedence.

S. L.—Our Scottish brethren are divided in opinion as to the steps which should be taken in putting lunatics under the protection of an asylum. In England the certificate of two qualified Practitioners is enough to commit the patient to the asylum; and the Commissioners of Lunacy being immediately informed of the case, act as judges thereon. In Scotland the Medical certificate is inoperative without the sanction of the Sheriff or his substitute. This system is defended by Dr. Christison and others on the plea that the sanction of a legal functionary of high standing gives comfort and security to the public mind, and that it relieves the Medical men of responsibility. Dr. Skae and others allege, on the contrary, that it leads to delay and uncertainty.

Errata.—The letter of Dr. Potter, of Kilkenny, on a case of Strangulated Umbilical Hernia, was accidentally printed last week from an uncorrected proof. There are several errors in the prescriptions, but they are so evidently typographical, that it is only necessary to explain the cause of the mistake.

A Card.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Having occasion to enter a pastry-cook's shop in the Lewes-road this morning, I was surprised to observe the name and address of a Practitioner exhibited in large characters on a good-sized piece of pasteboard in a prominent position on the counter. Perhaps you will kindly indulge the Advertiser by making his pretensions further known in the pages of your Journal.

The following is a copy of the exhibited notice:—"Dr. Moore's Dispensary, 44, Round Hill-crescent. Gratuitous advice every morning."

I am, &c.

Brighton, June 11. A Correspondent.

Ethics *v.* Etiquette.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir, — Your opinions as to the principles of conduct which should actuate the Medical Profession in their intercourse with Homœopquacks have met with a critic in the Editor of the *British Medical Journal*. You suggested that cases might arise as to which the moral duty of saving life and relieving suffering must take precedence of professional antipathy to the quack. The critical Editor in question affirms, however, in the broadest terms, that there are and can be no moral considerations in the matter. I quote his own words, "Bosh apart, we know right well that the whole question is one simply of money"! When this Journal attributed like venal motives to Mr. Roberton, Dr. Thorburn (the local secretary of the Association here) informed the Editor in the most gentlemanly way, that his real motives were a deep feeling for distress, and a regard for the calls of friendship and affection. These the Editor pooh-poohs as ridiculous and impossible when a Homœopquack is concerned. "We all know quite well, in our consciences," he says boldly, "that refusing to meet a Homœopath in consultation is a question with which morality and humanity have nothing to do!" I hardly feel it necessary to reply, that "we all know in our consciences" we are actuated by more honourable motives than our Editor attributes to us. We refuse to consult with any Homœopath, but we cannot refuse to save a patient who has trusted to them too long.

I am, &c.

A Member of the British Medical Association.

Manchester, June 10.

COMMUNICATIONS have been received from:—

Professor Simpson; M. Claude Bernard; Dr. Anderson; Mr. Holmes Cooper; Mr. Murray; Dr. Croskery, Jamaica; Registrar-General; Dr. Pitman; Dr. Radcliffe Hall; Dr. McWilliam; Dr. Young, Edinburgh; Mr. Wright; Mr. Hunt; Mr. Rutherford Adams; Mr. Cheeseman; Dr. Beale; Dr. Radcliffe; Dr. Thorowgood; Dr. Graily Hewitt; Dr. A. D. Thomson; Dr. T. Williams; Mr. Hunter; Dr. Cameron, Liverpool; Mr. Leith Adams, Malta; Mr. Foulis; Mr. Driggs; Mr. Soelberg Wells; Mr. Harrison, Liverpool; Dr. Ritchie; and our Correspondents at Bonn, Breslau, Paris, Vienna, etc.

APPOINTMENTS FOR THE WEEK.

June 15. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

17. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

18. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

Royal College of Surgeons of England, 4 p.m. Professor Hilton "On the Influence of Rest in the Treatment of Surgical Diseases and Accidents."

Ethnological Society, 8 p.m. T. J. Hutchinson, late H.M. Consul at Fernando Po, "On some Domestic and Social Characteristics of the African Tribes." Charles Livingstone "On the Inhabitants of the Batoka Country."

19. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

20. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.

Royal College of Surgeons of England, 4 p.m. Professor Hilton "On the Influence of Rest in the Treatment of Surgical Diseases and Accidents."

21. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

Samaritan Free Hospital Lectures, 4 p.m. Dr. Routh "On Endo-Metritis and its Results."

EXPECTED OPERATIONS.

Westminster Hospital.—The following Operations will be performed on Tuesday next, at 2 o'clock:—

By Mr. Brook—Amputation of Leg.
By Mr. Hillman—For Recto-vaginal Fistula; for Caries of Astragalus.

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ORIGINAL LECTURES.

LECTURES
ON
THE SPINAL CORD,
DELIVERED AT
The College of France,
DURING THE SUMMER SESSION 1860,

By M. CLAUDE BERNARD,
Member of the French Institute; Professor of General Physiology at the Faculty of Sciences, &c.

LECTURE XV.

ON THE ACTIVE DILATATION OF VESSELS.

Summary: Action of the Sympathetic Nerve upon the Vessels—When divided, it allows them to dilate: when galvanized, it causes them to contract—The former Result usually attributed to the mere distension of the Vessels, their Contractile Fibres being paralyzed—Insufficiency of this Explanation—This Dilatation of the Vessels is not a Passive, but an Active Phenomenon—Action of the Sympathetic Nerve upon the Pupil recalled—The Contraction of the Iris, when its Radiated Fibres are paralyzed, is due to the Action of the Circular Band, or Sphincter of the Pupil—In the same manner, two different Orders of Nerves, which act in direct opposition to each other, are met with in the Vessels—The fact proved by Experiments on Secretion—The Corda Tympani and Motor Nerve of the Parotid Gland dilate the Vessels of the Salivary Apparatus—Various Experiments tending to prove this—The Origin of this latter Class of Vasomotor Nerves is still involved in obscurity.

GENTLEMEN,—The action of the sympathetic nerve upon the vessels, as you are aware, is rendered apparent by variations of considerable extent in their capacity. It causes them to contract when galvanized, and allows them to dilate when divided. In short, on comparing the effects of this latter operation with those produced on the voluntary muscles by the division of the corresponding motor nerve, we are at first sight led to suppose this enlargement of the vessels to be occasioned by the sudden paralysis of their contractile elements. What are, in fact, the visible results of the experiment? A nerve which arises from the anterior tracts of the spinal cord, and spreads to the most remote ramifications of the arterial system, appears to exert a remarkable influence upon the temperature of the body. If one of its leading branches is divided, circulation is accelerated in the corresponding parts, the secretions flow more abundantly, and the temperature rises. If, on the contrary, it is galvanized, the reverse immediately takes place. Now this nerve evidently belongs to the motor system, for its peripheric, and not its central extremity, retains its usual properties when it has been divided. It seems, therefore, natural enough to conclude that the elevation of temperature and other effects which follow this operation arise from an afflux of blood to the parts thus withdrawn from its influence, and that this exaggeration of the vascular phenomenon is due to the paralysis of the capillary vessels; in other words, to their passive distension. This explanation, which has been adopted by several authors, appears to us insufficient, not to say unsatisfactory. We have ascertained, in fact, that after the experiment the blood which passes into the venous system is warmer than that which flows through the arteries. There exists, therefore, in these phenomena something beyond a mere passive distension of the vessels. We meet here with an action of a different and hitherto unknown kind.

In our experimental researches on secretion, we were led to the discovery of a power which acts in opposition to the influence of the sympathetic nerve, and is set at liberty by the division of this trunk. We shall no doubt make ourselves easily understood by referring to the alternative contractions and dilatations of the pupil, which first drew the attention of physiologists to this subject. When the pupil contracts, after the cervico-cephalic branch of the sympathetic nerve has been divided, it obeys the impulse of an antagonist power, which is attributed to the ciliary ramifications of the third pair. In short, the contraction of the iris is not a passive, but an active phenomenon; and the existence of circular fibres, which evidently fulfil this purpose, leaves no doubt on this point. The variations observed in the capacity of vessels appear to belong to the same class of phenomena, although contraction takes place in the first case and dilatation in the second. Nor is this a mere hypothesis, unsupported by positive facts. The active dilatation of the vessels is one of the most indisputable truths which have reached our knowledge. We have proved by direct experiment that there exist two orders of vasomotor nerves acting in opposition to each other, and that their properties are in most cases called into play by reflex actions. Our opinion rests upon the following experimental data.

When the sympathetic branch which extends to the submaxillary gland is divided, an unusual flow of blood to the part immediately takes place. But a similar result is obtained, without injuring the sympathetic nerve, by merely galvanizing the corda tympani; these two nerves are, therefore, opposed to each other, and the dilatation which occurs in the vessels, when the influence of the organic system has been suppressed, is due to the active interference of the tympanic nerve, liberated from its usual antagonist. Besides, when both nerves have been simultaneously divided, a passive distension of the capillaries really takes place, the vessels being thus entirely left to themselves; and the intensity of this phenomenon being accurately measured, we find it to be greatly inferior to the effects of galvanism applied to the tympanic cord, the sympathetic nerve being left untouched. It is hardly necessary to say that on exciting the motor nerve of the gland after destroying its antagonist, the effects produced reach at once the highest limits which they are capable of attaining. The recent discovery of the motor nerve of the parotid gland renders the demonstration complete; and the existence of two distinct classes of vasomotor nerves is a fact which now lies beyond the possibility of a doubt. You must excuse us, Gentlemen, for dwelling at considerable length upon this point; for, according to all received notions (up to the present time), contraction is the active or tonic state of all tissues; and to consider the opposite condition as anything but a passive effect, will probably appear a paradox, at first, to most physiologists; nor are we prepared at present to explain the manner in which this active enlargement of the vessels is effected.

We turn now to another part of the question. The two different kinds of vasomotor nerves may be supposed to arise from the sympathetic nerve, or it may be presumed, on the contrary, that they are derived from distinct sources. Anatomy seems to support this latter view; the constrictor nerves invariably belong to the organic system, while their antagonists, in every known case, arise from the cerebro-spinal axis; the nervous filament which presides over the functions of a gland is always a ramification of some motor branch; the corda tympani is derived from the facial, and the parotidian nerve evidently belongs to the same trunk, although apparently connected with the fifth pair; for the division of the facial, in its upper part, entirely deprives this latter nerve of its characteristic properties. It would be useless to endeavour, in the actual state of our knowledge, to solve the problem; we shall perhaps, on a future occasion, meet with a more favourable opportunity of discussing it. We must, however, draw your attention to an important point: we allude to the peculiar slowness with which (according to all observers) the organic system transmits the impressions made by stimuli; when the pupil, for instance, is dilated by the application of galvanism to the sympathetic nerve, the effect only takes place by degrees; and it persists some time after the stimulus has ceased to act. The nerves which cause the vessels to contract being evidently derived from this source, you will not be surprised to find that their action is strictly the same; but the nerves which dilate the vascular system—the motor nerves of secretion—are in this respect closely allied to those of organic life: they produce effects which slowly appear, and slowly depart. Some physiologists, therefore, believe them to be ramifications of the sympathetic nerve, probably derived from some of the numerous anastomoses which unite the two systems of animal and organic life: we do not, however, consider this as fully proved by the preceding remarks; for the motor nerves of glands, acting as they do upon the non-striated muscular fibres, ought not perhaps to be compared in this respect with those which extend to the voluntary muscular element; the impression is perhaps transmitted with equal rapidity on both sides, but is not so readily obeyed in the first case as in the second. In short, we are at a loss to determine whether the properties of the nerve, or those of the peculiar tissue to

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which it spreads, are to be viewed as the cause which retards the appearance of contraction when excited.

Having now fully examined the modifications produced by the nervous system in vascular phenomena, we shall extend our inquiries to another point, and consider its action, not upon the vessels themselves, but upon the blood which they contain: when this subject has been discussed, we shall have obtained a full view of the influence which the spinal cord exerts upon the chemical phenomena of life, by means of an involuntary nervous system, the sympathetic nerve, which resembles the cerebro-spinal apparatus in all respects save consciousness of its own activity.

ORIGINAL COMMUNICATIONS.

A CASE OF TUBERCULAR ORCHITIS, WITH INDICATIONS OF HEREDITARY SYPHILIS.

CASTRATION—RECOVERY—COMMENTS.

By FURNEAUX JORDAN,
Assistant-Surgeon to the Queen's Hospital,
Consulting Surgeon to the Birmingham Eye and Ear Dispensary,
Professor of Anatomy at Queen's College.

I was requested, a few months ago, by a Medical friend at Dudley, to examine a diseased testis which had obstinately resisted treatment—treatment carefully devised and patiently prolonged. All the symptoms pointed to tubercular disease. My attention was then called to the patient's head, which was covered with nodes. These were justly considered peculiar, because the man had never contracted either primary or secondary syphilis. On this point we were well satisfied. Nor did we forget that on several matters—physiological and pathological—more falsehood prevails than on all other subjects together. Bearing in mind Mr. Hutchinson's views on the character of the teeth in hereditary syphilis, and that the nodes in this case were probably due to inherited mischief, I examined the teeth. They presented the most marked peculiarities of the syphilitic tooth that I have yet seen—and I have seen many cases before and since. I then inquired—presuming that information touching interstitial keratitis would be best obtained by a simple question—if he had ever been blind. He had been blind for many months when he was about fourteen. For the rest the case shall tell its own tale. He entered the Queen's Hospital under my care, where the following report was made:—

A. G., aged 30, looked 45, a miner. Married, and has children. Of medium stature. Hair and irides dark. Had been of temperate, regular, and sober habits. When four weeks old his skin is said to have "peeled off." He remained always feeble and in ill health. Between 13 and 14 he had inflammation of the eyes, and was quite blind for several months. The "sight" (cornea) of the eyes was red and opaque. He could always discern light. Three months after the eyes became affected, a large hard swelling formed on the left shin bone. The eye-sight gradually returned, and the swelling (node) on the tibia gradually disappeared. Two years ago the left testis began to swell in an irregular manner, with slight uneasiness and tenderness. The patient himself attributed the affection to a blow which he had previously received on the abdomen. Two of the projecting nodules, one shortly after the other, became very tender, an abscess formed in each. They burst and left two sinuses, which discharged a thin fluid and a crude material for upwards of twelve months. During the discharge the diseased organ increased rather than diminished in bulk. After the testis became diseased several rounded hard swellings appeared on the head. A history of the parents could not be obtained.

On admission he presented the following appearance:—Complexion earthy; nose flattened and short. On the forehead were two hard, convex swellings, very slightly painful and tender; and under the hair were seven other enlargements possessing similar characters. Their size varied from that of half a walnut to that of half a small apple. The lower half of the right humerus, at its outer aspect, was the seat of a large swelling resembling those on the head. A similar enlargement covered the upper half of the left tibia. The incisors in both jaws were narrower at the cutting edge than at the gums, and at the apex there was a single deeply-cut notch. This feature was present, not in the incisors only (it is most characteristic in the two upper central incisors), but in the canine teeth also. The teeth were discoloured from neglect, but neither broken, irregular, nor carious. The left testicle was the size of a large orange: at its lower part were several nodular projections, giving to the touch the impression of induration and irregularity. There were two small, deep cicatrices at the lower part of the scrotum which were adherent to the tunica albuginea. At the upper part of the scrotum the swelling was softer and obscurely fluctuating, but not in the least transparent. The tumour was very slightly painful. The tenderness was unimportant, and was everywhere alike; it was accompanied, however, by dragging pains, and by its size and weight produced so much discomfort and annoyance as to render occupation of any kind impossible. He had a rather troublesome cough and slight dyspnœa. On examining the chest very carefully, I found no symptoms which could be considered unfavourable to operative proceedings.

As the diseased gland had resisted all treatment for a long period, and the bulk had not diminished by the long discharging though now closed sinuses, its removal appeared to me a necessary proceeding. In the operation I made the long incision eliptical at its lower part, so as to include the adherent cicatrices. The patient made the excellent recovery which is so customary after the operation of castration. During convalescence a well-marked node formed on the right molar bone in the course of a few hours. It almost, but not quite, subsided in a few days.

Examination of the extirpated organ disclosed three small tubercular formations in the epididymis. The body of the testes was nodulated, and contained numerous large, yellow productions, similar to those of the epididymis, except in size. The serous tunic was thickened, and contained several drachms of serous fluid. Under the microscope I found in the tubercular material abundant nuclei, fat-globules, nucleated cells of varying size and more or less shrivelled. Mixed with these, and especially abundant at the circumference of the tubercular growths, were numerous elongated nucleated cells, probably of young connective tissue.

Careful reflection on the above case suggests several interesting considerations.

The formation of nodes as a result of hereditary syphilis cannot easily be doubted. It is not improbable that other obscure affections occurring even in adult age may in the future be attributed to hereditary syphilis. The rapid formation and very variable duration of nodes in unsuspected localities, might produce very inexplicable phenomena. (I have seen several such cases. I have at the present time two young men under treatment, the subjects of constitutional syphilis, suffering chiefly from anomalous conditions of the special senses, sight and hearing, with other indications of cerebral disturbance, and which, I think, can be best explained by supposing the presence of intra-cranial nodes. In these cases the greatest good has been effected by the mercurial vapour-bath, the enforcing of which constitutes Mr. Langston Parker the first authority in the treatment of syphilis.)

In the case recorded above, the presence of nodes from hereditary syphilis, is valuable evidence in favour of Mr. Hutchinson's views on the peculiar configuration of the permanent teeth in inherited syphilitic taint. This evidence is further strengthened by the peculiarities of the complexion, the nose, and the ophthalmic history.

The tubercular affection of the testis in a syphilitic constitution is a significant phenomenon. But, I would ask, is there any essential difference in the mode of development between the products of chronic orchitis and tubercular orchitis? May not the "tubercular" character of the formation be due to the predominance from special causes of the degenerative over the textural formative process? The researches of Dr. Andrew Clarke and Mr. Curling have apparently left no doubt as to the formation of the tubercle within the tubuli. But, after repeated microscopic examination of the tubercular and other formations in the testis, after a full recognition of our present knowledge of histological anatomy and the pathological interpretation (the principle of which will probably not be materially affected by recent researches into the powers of molecules and corpuscles)

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which Virchow has put upon it, I am compelled to doubt the commonly-accepted views of its mode of development. Dr. Carswell considered that the tubercle was formed on the free surface of the tubuli. Mr. Gross speaks of it as "poured" on to the surface. Mr. Curling, in his admirable monograph, coincides with Dr. Andrew Clarke in the view that the tubercular material forms within the tubuli by a process of abnormal nutrition of their cellular contents. I venture to suggest that it is formed in the connective tissue, between the basement membrane (with its epithelial layer) and the fibrous tunic, and in the fibrous (dense connective tissue) layer itself. It is not easy to deny that the tubercular formation may occur in the interstitial areolar tissue.

The tubercular growth is of an inflammatory character. It is a new formation, arising in a "degenerative proliferation," in groups of connective tissue corpuscles. These groups form granules, and by the agglomeration of the granules the tubercular formations increase in size. Subsequently the formation usually undergoes a fatty degeneration, and a cheesy metamorphosis, like other new cellular productions, as pus and cancer. Herein, probably, lies a distinguishing feature of tubercular growth, compared with the tough yellow production of the simple chronic orchitis.

In the formation of a node we have another illustration of increased production of degenerated tissue in that layer of dense areolar tissue—the periosteum.

I cannot but think that the pulmonary symptoms in the the above case were due to an abnormal and textural activity in connective tissue of the lungs—a degenerative productiveness—a multitudinous division of old histological elements. If we apply to this condition the term syphilitic phthisis, it is easy to understand why it is a comparatively curable affection. We know something of its causes, and they admit of removal.

Birmingham.

PRACTICAL HINTS ON THE ACCOMMODATION OF THE EYE, ITS ANOMALIES AND THEIR TREATMENT.

By Mr. J. SOELBERG WELLS.

(Continued from page 574.)

HYPERMETROPIA.

We have now to turn our attention to an affection which was but little noticed, certainly not properly understood, until the last few years. Von Graefe was the first to describe it accurately and scientifically (a) and since then Donders' elaborate researches have shown how common this affection is, and how very frequently that peculiar weakness of sight, which has received so many various names, and whose nature was so little understood, viz., asthenopia, is due to it. The affection I speak of was first called Hyperpresbyopia, but it was soon found that it may, and generally does, exist without any presbyopia at all, and that therefore this name was most inapplicable. It was then termed hyperopia, this term is better, but Donders now proposes to call it hypermetropia which is undoubtedly the best name for it, and should, therefore be generally adopted.

By hypermetropia is meant that peculiar condition of the eye, in which the refractive power of the eye is too low, or the optic axis (the antero-posterior axis) too short, we may, however, also have both these causes coexisting. We may often almost diagnose the hypermetropic eye by its peculiar shape, it appears flatter and smaller than the normal eye, it does not fill out the aperture of the lids, there is a greater or less space (like a little pouch) between the eyeball and the canthus, more particularly the outer canthus.

The effect of the too short optic axis, or the too low refracting power of the eye is that the focal point of the dioptric system lies behind the retina, so that in a state of rest even parallel rays are not focussed upon the retina, but behind it, and only convergent rays are united upon the retina.

The normal (emmetropic) eye unites parallel rays upon the retina without almost any (if any) effort of accommodation, but it also possesses the power of accommodating itself without difficulty or annoyance for divergent rays, coming from objects 6"—8" from the eye, for a short time it can even unite rays upon the retina which come from 3" — 4" distance. The focal point of the dioptric system lies in the normal eye exactly upon the retina.

In the myopic eye, it will be remembered, the state of refraction is too great, or the optic axis too long, so that when the eye is in a state of rest the focus of the dioptric system lies in front of the retina, and parallel rays (emanating from objects at an infinite distance) are brought to a focus before the retina, and only more or less divergent rays are united upon the latter.

Now, in hypermetropia we have just the reverse of this. The refractive power of the eye is so low, or its optic axis so short, that when the eye is in a state of rest, parallel rays are not united upon the retina, but behind it, and only convergent rays are focussed upon the latter. We give the slightly divergent, almost parallel rays emanating from distant objects a convergent direction by means of a convex glass, and the reader will now see how it is that a hypermetropic eye requires convex glasses for seeing distant objects. The patient may require perhaps even a stronger pair for near objects. The consequence of this low refractive power of the eye is, that whereas the normal eye unites parallel rays upon its retina without any accommodative effort, the hypermetropic eye has already, in order to do so, to exert its accommodation more or less considerably, according to the amount of hypermetropia. This exertion increases, of course, in direct ratio with the proximity of the object. If the degree of hypermetropia is moderate, and the power of accommodation good, no particular annoyance is perhaps experienced, even in reading or writing. If, however, the hypermetropia is absolute, the patient will not be able to see well at any point.

We must not be surprised at the fact, that persons suffering from hypermetropia are often not aware that they see worse at a distance than other people. On the one hand, but few people have to look for any length of time at distant objects, and on the other hand the aspirations of some are so modest, that they fancy they enjoy capital sight if they can distinguish between a church and a house across a street. It is different, however, with near objects; a person soon finds out if he cannot read or write for a continuance without difficulty and annoyance.

We sometimes meet with normal eyes which not only see perfectly near at hand and at a distance, but are capable of relaxing their power of accommodation to such an extent, that they can unite convergent rays upon the retina, being able to see at a distance with slightly convex glasses. Their eye is then hypermetropic. Donders calls this *facultative* hypermetropia.

Let us now consider how we are to examine a person as to hypermetropia. After I have explained this, we can more easily pass on to the consideration of other questions connected with this affection.

The patient complains that, after he has been reading or writing for a short time, the letters become ill-defined, and appear to run into each other. At a distance, however, he says he can see perfectly.

His eye appears smaller and flatter than a normal eye; it does not fill out the palpebral aperture properly; there is a little space between the outer canthus and the eyeball. Upon turning the eye very much inwards the posterior portion of the eyeball is seen to be flatter and less rounded than it should be.

We tell the patient to read No. 20 of Jäger's test-types, placed at a distance of eighteen to twenty feet, so that the rays, as they impinge upon the eye in an almost parallel direction, may be considered as coming from an infinite distance. He can read No. 20 very well without any glass, and even No. 19 somewhat indistinctly. Now a normal eye should, at this distance, be able not only to read No. 19 fluently, but even No. 18, and words of No. 16. We now place a weak convex glass of 36 or 40 inches focus before his eyes; this improves vision somewhat; we try a stronger glass and find at last that convex 20 improves most of all, with it he can read No. 18. The letters appearing clearer and well defined—convex 16 is not so good—No. 20 is therefore the strongest convex glass with which he can see well at a distance; and this, according to Donders, gives us the degree of hypermetropia, which is consequently = — $\frac{1}{20}$. Each eye should be tried separately, as the degree of hypermetropia may vary. We now let the patient read very small print with convex 20, and find that he can read No. 1 of

(a) Graefe's "Archiv für Ophthalmologie," II. 1. 179.

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Jäger clearly and distinctly as close as 7″ from the eye; his range of accommodation is therefore good.

If we, however, prescribed convex 20 for the patient, and told him that these spectacles would permanently free him from all annoyance in reading, writing, etc., and that he would not, after a time, have to change them for a stronger pair, we might commit a grave error, and subject ourselves to the vexation of having him return to us in the course of a few weeks with the complaint that the glasses we chose for him did not suit: that although they enabled him to read or work for a longer time than before, he could not go on for any length of time without being troubled by symptoms of asthenopia.

Now, into what error should we have fallen here? Simply into that of having given him spectacles which were too weak, which did not neutralize his hypermetropia.

The fact is that the patient has been so accustomed to exert his accommodation even when regarding distant objects (in doing which the normal eye has hardly to accommodate at all), that this exertion of the accommodation has become so habitual, that he cannot relax it completely, even when there is no occasion for it, when the malconstruction of his eye is compensated for by the use of a convex lens. With convex 20 he did not, therefore, accommodate for his natural far point, but for a nearer point, as he could not relax his accommodation sufficiently. We have, therefore, arrived at too low an estimate of the degree of his hypermetropia. In order to find out its real amount we must paralyse the power of accommodation by the instillation of a strong solution of atropine. Donders has found that in order completely to paralyse the muscle of accommodation (b) a solution of 4 grains of atrop. sulph. to 1 ounce of water is necessary, and that it takes about two to three hours to act thoroughly. A weaker solution of 1 grain to 2000 parts of water suffices to dilate the pupil widely, but only partially paralyses the ciliary muscle.

After the instillation of a strong solution of atropine, we, after the lapse of a couple of hours, again examine our patient. We now find that he cannot read No. 20 (at 20 feet distance) at all without glasses. A normal eye would be able to do so, would, indeed, according to Donders, become but very slightly hypermetropic after atropine, requiring, perhaps, only convex glasses of 80 or 60 inches focus to see more distinctly at a distance. In our patient, however, the difference in the degree of hypermetropia, before and after atropine, is great. Whereas, he could before its application see distinctly at a distance with convex 20, he now requires convex 8. And we now see, from the difference of the strength of the glasses required before and after atropine, to what extent he still exerted his accommodation in looking at distant objects, before we had paralysed his power of accommodation by atropine. Donders, however, points out the fact that only in young persons, with a good range of accommodation, is the difference in the degree of hypermetropia before and after atropine so great. In more advanced age, and in young persons with a smaller range of accommodation, the difference is much less. We should only put the atropine into one eye at a time, else we render the patient incapable of working for several days. After the effect of the atropine has gone off completely (which sometimes takes six or seven days) we apply it to the other eye. This precaution is the more necessary in the case of poor Hospital patients, to whom the loss of a few days' work is of great consequence.

16, Savile-row, W.

(To be continued.)

CASE OF SOMNAMBULISM.

By H. LOWNDES, M.R.C.S. and L.S.A.

Andrew W., aged 26, a sailor, was seen by me at 9 a.m. on June 3, 1861, suffering from severe sprains of both ankles, and general shock, caused by his having thrown himself out of his bedroom window on the third story, a height of twenty-four feet at 2 a.m. the same morning. It appears that he had been from sea about a fortnight, and had been living freely, and indulging in ale and spirits up to the time of the accident, but neither his appetite nor his sleep had been affected. On the night in question he made a hearty supper as usual, and went to bed, another man sleeping in the same room. He states that he fell asleep, and did not awake until he found himself on the pavement. He remembers dreaming that some people were detaining him in some house from which he wished to escape, and that he jumped up and rushed through the window. The lower part of the window-frame he was able to take out by removing a slip of wood, and it was found, together with the little blind attached to it, laid carefully down against the wall; then, as the opening was but narrow, he must have swung his feet through and dropped from the window-sill.

I found him quite sensible, but faint and weak. He was lying where they had laid him after the accident. His feet and ankles were much swollen, but I could detect no fracture. Turning him caused great pain in the back, but I could find no irregularity in the spinous processes of the vertebræ, and he had micturated since the accident. I had him removed to the Royal Infirmary, where I find he is going on favourably, and has had no symptoms of delirium tremens.

The other man that slept in the same room was not awoke, but if he had awoke, and had attempted to stop W—— in his flight, a very serious medico-legal question might have arisen, instead of the occurrence of a singular accident.

1, Catherine-street, Liverpool.

(b) This muscle has received various names, viz. tensor choroideæ, ciliary muscle, and Brücke's muscle.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

CONDUCTED BY

JONATHAN HUTCHINSON,

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AND BY

J. HUGHLINGS JACKSON, M.D.

SYPHILITIC AFFECTIONS OF THE NERVOUS SYSTEM.

CASES OF EPILEPSY ASSOCIATED WITH SYPHILIS.

The following Cases of Epilepsy, in which there is in each a clear history of syphilis, will no doubt be interesting to our readers. Although this subject has received much consideration from several English observers, amongst whom we may mention Dr. Graves, Dr. Todd, Dr. Budd, Dr. Read (of Belfast), and Dr. Inman, yet the connexion between the two affections is not yet so widely recognised as is desirable. In bringing the following series of cases before the attention of our readers, we shall make free use of the valuable monograph recently published by M. Lagneau (a). In most of the following cases the convulsions were limited to one side, and in one of them the epileptic fit was not complete, there being no loss of consciousness. It might perhaps, strictly speaking, be more correct to call them cases of epileptiform convulsions; but the name of Epilepsy is retained as being more common.

Case 1.—*Syphilitic Caries of the Left Parietal Bone—Convulsive Attack chiefly of the Right Side, unattended by Loss of Consciousness, but followed by Hemiplegia on the Right Side—Relief by Trephining—Death—Autopsy.*—The life history of this case, a patient of Mr. Bryant's, at Guy's Hospital, will be found recorded in this Journal for August 18, 1860. It is interesting not only as a case of epilepsy arising from syphilitic disease of the cranium, but also from the fact that syphilitic deposits were found in the testes, liver, and spleen. The case excited considerable interest, and a further notice of it will be found in our report of the Pathological Society for December 15, 1860 (when Dr. Wilks exhibited the testes, liver, and spleen), and also for January 20, 1861. It must be stated, however, that the man denied all history of syphilis, but there could, in the hands of so able a Pathologist as Dr. Wilks, be no doubt as to the diagnosis of the case. As

(a) "Maladies Syphilitiques du Système Nerveux." Par Gustave Lagneau fils. Pp. 528.

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regards the points which we now wish to consider—viz., the epilepsy, the history of this case is pretty much that of most others depending on local syphilitic disease of the cranial bones. The following is a brief account of the chief symptoms of the case:—A man, aged 38, was admitted in February, 1860, having lost the use of his right arm and leg in a convulsive attack, unattended by loss of consciousness, some days before. Over the left parietal bone was an ulceration exposing roughened and inflamed bone, from which he suffered very great pain. Three days after admission he had a second fit, and subsequently many; all were observed to affect chiefly the right side. Mr. Bryant trephined him on February 17. He improved, and except a slight fit on February 24, he had no more for two months. He got rid of his pain, and quite recovered from the hemiplegia, but on April 24 the epileptic attacks again appeared; he again had hemiplegia, and died on June 14. The following is an account of the post-mortem. It was accidentally omitted in our report of the case:—The body was wasted, and the skin slightly yellow, as seen in pyæmia. Over the left parietal bone the integument was deficient, inflamed and roughened bone appearing in the wound. At one spot there was a round opening in the skull where bone had been removed by the trephine, and this opening was completely closed by a dense rough membrane. The bone around it was rough and inflamed, and in parts necrotic. At the margin of the integument were some hard yellow fibrous deposits, such as were found in the liver. The dura mater was closely adherent to the skull, and softened; on removing it collections of pus were detected between it and the bone. Some pus also was observed on the inner surface covering the brain on the left side, corresponding to the external disease, and this slightly affected the grey matter, but to no great depth. The lungs were slightly œdematous, but not inflamed. The right lower lobe, however, had a thin layer of lymph on its surface. The abdomen was swollen and tympanitic, and contained some purulent serum from recent peritonitis. The liver was adherent to the diaphragm, and at this spot the organ was filled with large hard yellow masses such as are met with in syphilis, and also a distinct deposit of a similar kind on its edge. The spleen was large and also adherent to the diaphragm, and it contained a large mass of tissue like those observed in the liver, about the size of a walnut. This tissue, says Dr. Wilks, who examined it, consisted of a mixture of a yellow and of a translucent material; the latter was composed of a simple fibre tissue; the former, of the same combined with fatty granules. The kidneys were healthy.

Thus we have epileptiform convulsions followed by hemiplegia on the opposite side to the syphilitic caries. Dr. Todd, in his Clinical Lecture "On Diseases of the Nervous System," gives a case which is similar in some respects, although the early recognition of the cause of the symptoms led to the protraction of the fatal issue for some years. The following abstract of the case given by this eminent Physician will help to illustrate clinically the subject under discussion:—

Case 2.—Primary Syphilis—Secondary Rash and Iritis—Five Years later, Rigidity of the Muscles of the Right Forearm—Cure by Iodide of Potassium—Some Years later, Periosteal Pain in the Left Parietal Region—Convulsions on the Right Side—Death—Autopsy.—A man, aged 34, had primary syphilis, for which he was freely salivated. He had subsequently secondary symptoms, rash and iritis, from which he recovered, and for five years remained well. The first of the train of symptoms referable to the nervous system was contraction of the flexor muscles of the right forearm and numbness of that region, which persisted for many months, until rapidly cured by iodide of potassium. About two years later he had several fits, accompanied by severe pains in the head. He was then admitted into King's College Hospital. The pain was in the left parietal region. It was not increased by pressure, but it was worse at night. There was periostitis of the head of the fibula, which was attended by great tenderness, and also by increase of pain at night. The muscles of the right forearm, opposite the site of pain in the head, were very rigidly contracted, and there was some loss of sensibility of the same region. Dr. Todd then diagnosed "syphilitic inflammation of the dura mater, the internal periosteum of the cranial bones; in short, an intracranial node which caused pressure on the surface of the cerebral hemisphere, and gave rise to paralysis, with irritation and consequent muscular rigidity." "The paralysis, imperfect as it was, and accompanied by rigidity, was just such as would arise from pressure or irritation of the *surface* of the brain." Iodide of potassium was given (three grains three times a-day), and in sixteen days he was well, and was discharged May 19, 1849. Except that he suffered from pain in the head, he remained well until June, 1851, when he was seized with violent convulsions, limited to the right side of the body. He was again admitted, and while in the Hospital he had several severe convulsive attacks on the right side. He was treated by mercury and by the iodide of potassium, and was again discharged well July 18. He subsequently (December, 1852) died in convulsions, affecting chiefly the right side. The convulsions were preceded by severe pain in the left parietal region. *Autopsy.*—At the posterior and upper part of the left parietal region, and at about an inch from the longitudinal fissure, the dura mater was adherent to the subjacent membrane for about the space of a square inch, and so firmly that in taking it off it brought away not only the pia mater, but the cortical substance of the brain to a considerable extent. Here the grey matter was darker and the brain substance harder than usual. On the surface of each hemisphere, just above the upward termination of the fissure of Sylvius, there was a depression which corresponded in size and position precisely on both sides.

In Mr. Bryant's, as well as in Dr. Todd's case, the disease was of the bone and dura mater on the side opposite to the side convulsed and paralysed. In Dr. Todd's case the symptoms at first came on slowly, and the muscles of the forearm were rigid, showing, as Dr. Todd points out, that there was some irritation of the brain—its surface—producing clonic spasm. The patient, as stated, had subsequently epileptiform convulsions, in which the right side was chiefly convulsed, and in which he lost his consciousness. In Mr. Bryant's case there was only partial consciousness, but in this case, also, the convulsions were chiefly on the side opposite to the lesion.

Dr. Todd also gives another case, in which a convulsive attack, especially on the left side, was the first cerebral symptom following on periosteal pain on the opposite side of the head. This patient ultimately died, and similar conditions were found as in the above case. He relates another case of recovery from similar symptoms under the use of calomel and opium. In the "Dublin Hospital Reports," vol. i., is a case related by Sir Philip Crampton, which in its general features resembles the above case, and although there is no mention of syphilis, yet probably that was the cause. In this case, that of a woman, aged 32, trephining at the seat of local swelling, and tenderness of the right parietal bone, was followed by cure of the following symptoms—viz., "The right arm was wasted and paralytic, and the fingers were contracted. The lower extremities were so feeble that she could not stand erect without support. Her speech was faltering and her articulation indistinct, and she suffered very much from pain in a swelling on the left side of the head. She had received a blow on the head six months before, which was followed by the painful swelling, and subsequently by an epileptic fit. She was trephined on August 18, and left the Hospital on September 1, and returned to her occupation on the 20th." There is no note of the further history of the case.

Dr. Thomas Read, of Belfast, in the *Dublin Medical Journal*, vol. xiii. p. 53, 1852, relates three cases. The following is a very brief abstract of the third case. We shall quote the others in a future series.

Case 3.—Syphilitic Meningitis—Epileptic Seizure—Intermittent Cranial Neuralgia—Mental Derangement—Paralysis of the Sphincters.—This patient had been during the previous three years under Dr. Read's observation for tertiary syphilitic symptoms of various kinds, of great severity. The first cerebral symptom was the epileptic fit. He fell suddenly, was much convulsed, and was insensible. He gradually recovered from the fit, but violent pain in the head set in. He was, after the failure of opium, quinine, etc., ordered ten grains of the iodide of potassium every six hours; but this also failing, the vertex was shaved and blistered, and mercury rubbed in. In a fortnight his distressing symptoms were better, but he would not continue the mercury. The iodide of potassium was then given in its stead. Six weeks later, when Dr. Read again saw him, he was worse, and now suffered from great mental debility, loss of memory, and delusion, and showed a disposition to be violent and excitable, so as to render strict observation necessary. His head was shaved, a blister applied, and iodide of potassium was given every six

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hours. There was no fever. This treatment, however, was not followed by any improvement. The sphincters lost their power, and more threatening symptoms of cerebral disease set in, so that it was determined once more to have recourse to mercury. Under its use he recovered gradually. Small doses of the tincture of the sesquichloride of iron were also given. At the time Dr. Read wrote, a year later, the patient remained well.

In reference to the cause of epilepsy, in such cases as the above, we shall again quote Dr. Todd.—"The occurrence of epileptic fits in such cases as these appear to me to denote that the brain itself is involved in the morbid action either by extension of irritation from the diseased bone or by the direct influence of the syphilitic poison; but in all cases the simple existence of the diseased state of the dura mater did not seem sufficient to cause the fits. The morbid process had been of long continuance in the dura mater before the fits began. They seem to have been brought about by causes operating on the whole system—upon the blood—upon general nutrition—and upon that of the brain in particular, which must have already suffered a good deal by the neighbouring disease of the dura mater." Dr. Todd then goes on to speak of epileptiform attacks in which one side was affected without loss of consciousness,—as in Mr. Bryant's case (Case 1). It was the opinion of the late Dr. Addison that in cases of epilepsy in which there was no loss of consciousness the disease was probably due to some organic change within the cranium. We shall return to this subject after citing other cases.

Case 4.—Node of the outer Margin of the Orbit, causing Diplopia by displacing the Eyeball—Cure by the Iodide of Potassium—Epileptiform Seizures chiefly affecting the Left Side—Persistent fixed Pain over the right Parietal Bone—Recovery under the use of the Iodide of Potassium.—Elias A., aged 53, applied to Mr. Hulke, in November, 1858, for diplopia, arising from displacement of the right eye by a periosteal node growing from the outer margin of the right orbit. The node and the diplopia disappeared under the use of iodide of potassium. Some months later he began to suffer from pain in the head: it was severe, constant, and fixed to a small spot corresponding to the centre of the right parietal bone. He had occasional loss of consciousness, and slight convulsions, chiefly affecting the left side. These were much improved by the iodide of potassium. He subsequently got quite well, and remained so until February, 1861, when he was attending Mr. Hulke for dyspepsia.

The following case is copied from Mr. Hutchinson's case-book:—

Case 5.—Syphilis followed by Secondary Symptoms, with Iritis Twenty Years Ago—Epileptiform Convulsions Preceded by an Aura from the Right Foot—Partial Paralysis of the Right Arm and Leg.—John C., aged 42, admitted for slight iritis (syphilitic) of the right eye. Twenty years ago he had a chancre which was followed by a pimply rash, and soon after by an inflammation of the right eye, which was treated by Mr. Macmurdo by the application of belladonna, and the internal administration of mercury. He had a good deal of pain. The attack lasted two months, and no doubt was iritis. He got quite well of this affection, and until the present attack (in the same eye) he had not suffered from it. The pupil when Mr. Hutchinson saw him, dilated well by atropine, but with much irregularity. He had had five children, all of whom were alive and reputed to be healthy. The eldest, aged 13, was brought, and in him Mr. Hutchinson found no indications whatever of inherited syphilitic cachexia. The boy had excellent teeth. In addition to the iritis, this patient had also partial loss of power in the right arm and leg. He walked with a slight limp, and the power of the arm was much impaired. The supinator and extensor muscles of the forearm of the right arm were very much wasted. The extensors of the left forearm were also wasted, but in a less degree. When he held his arms straight out the hands dropped, the right the most so. He could, however, accomplish all movements, but very slowly. There was no appreciable want of symmetry in the face, although, as will be seen, the right half was convulsed in the fits. The history of the hemiplegia dates eight years back, and followed an epileptic fit. These fits, of which in eight years he had had only eight, would begin by twitching in the foot and leg, then in the side, arm, and right side of the face. He would be "drawn up," and had severe pains, and at length after the lapse of two or three minutes he became insensible. The insensibility, he said, lasted about fifteen minutes. Under the cushion of the right great toe was a part which was tender when he trod on it, and caused very "nasty sensations to fly up into his head." He was troubled with flatulence, which, he said, "would fly to the foot" and cause the sensations mentioned. In this case there was no local pain in the head, except slight pain in the temples, which was aggravated by excitement. He had tinnitus aurium, but his hearing was very good on both sides. There was no evidence of petit mal. As some of the symptoms appeared like those of lead poisoning, we may add that Mr. Hutchinson was unable to trace any history of colic or of any exposure to that metal. There was no blue line on the gums.

In this case we have probably a persistent lesion of some part of the nervous system, acting on which now and then an eccentric irritation probably developes the fit of epilepsy. Case 8, in which epilepsy occurred in association with congenital syphilis presents features very much like the above. In that case, however, although one side only was affected, and the convulsive movements began in the leg of that side and gradually extended to the whole side, there was no precise spot, as there was in the above case, from which an aura proceeded.

Our readers will be aware that Dr. Brown-Séquard, after certain injuries to the spinal cord, in animals, has been able to excite fits of epilepsy by irritating parts of the skin supplied by some filaments of the auriculo-temporal, sub-orbital, and a few of the second, and perhaps of the third, cervical nerves. Thus we have a central lesion which does not produce epilepsy, except some eccentric irritation acts on the nervous system thus injured. Now, in Case 5 there is, no doubt, some local lesion, probably of the bone and dura mater, on the opposite side to the hemiplegic convulsion, but which only becomes the cause, and then indirectly, of the fit, when, as in the case of Dr. Brown-Séquard's animals, some eccentric irritation is superadded. Of course, *it is only* presumed that the cases are parallel to this extent, that there is in both a persistent lesion of the nervous system and an eccentric irritation. In the epilepsy artificially produced, the lesion is in the cord; in the above cases, most likely on the surface of the brain. And again, the eccentric irritation in the first proceeds from a certain part of the face, and in the second from the foot. The lesion and the aura differ in the parts they affect, but there is probably great similarity in the mode in which the fit is produced in each case. Dr. Brown-Séquard (*Lancet*, 1858, vol. ii., p. 572) writes, "even in cases of epilepsy due to a disease of the encephalon, the cause of the fits may originate from some points of the skin, and the prevention of the passage of the aura, in such cases, can prevent the fit."

There is now attending Dr. Brown-Séquard's out-patients' room a man, whose case, so far as the production of the fits is concerned, resembles very much Mr. Hutchinson's (Case 5). His fits are, however, more frequent. They also are preceded by an aura from the great toe of the left foot. The convulsions first affect the left leg, and then the whole body, unconsciousnes supervening. This patient learned himself to stay the fits by grasping the limb tightly, and on several occasions the application of ligatures altogether prevented them. Lately, however, the fits have occurred without any warning, or to adopt the ingenious theory of Dr. Brown-Séquard, the aura has become unfelt—an aura arises from the foot, but the patient is not conscious of it. We gave in this Journal for December 22, 1860, an account of several cases in which fits of epilepsy, preceded by an aura, were arrested by the application of the ligature, and, at the same time, a brief notice of the views of Dr. Brown-Séquard in reference to the mode of production of epileptic fits of this kind. The two following quotations, taken from the works of this Physician, will no doubt be interesting, as bearing on the point—viz. how, from a *persistent* central lesion of the nervous system, *attacks* of epilepsy arise, the patient having often long intervals of freedom from attacks; and also, how it happens that, in two patients suffering from a similar lesion, one may have epileptic attacks and the other not:—"If epilepsy has truly been the result of an alteration of the spinal cord in all or in some of the above cases [narrated in his work, 'Researches on Epilepsy'], it might be asked why there are so many cases of disease or injuries of the spinal cord without

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epilepsy. This objection loses its value when we remark that, every day, there are cases of tumours and various alterations of the brain without epilepsy, and that, nevertheless, no one doubts that this disease is sometimes produced by such lesions. Besides, I have found that certain kinds of injuries to the spinal cord, in animals, produce much more frequently than others an epileptiform affection, and there is only one kind of injury which seems to produce it constantly."

The following quotation from Dr. Graves is also interesting in reference to the fact that a persistent lesion of the nervous system manifested itself by intermittent attacks. Dr. Graves, in his "Clinical Lectures," vol. i. p. 579, writes thus:—"I could also give you many cases in which an injury done to some of the branches of the dental nerve has given rise to symptoms closely resembling those of tic-douloureux. One of the most curious circumstances connected with such cases is, that the pain is always more or less of an intermittent character. The same thing is observed in that form of headache which arises from irritation of the brain, produced by spiculæ of bone growing from the internal table of the skull. In a case which occurred some time back at the Meath Hospital, when several spiculæ, some of them more than a quarter of an inch in length, were pressing on the brain, the headache was of a distinctly intermittent character." He adds, "This remarkable periodicity of exacerbation, in cases where the operation of the exciting cause continues still the same, seems to be peculiar to the nervous system." The fact that the local lesion alone was not sufficient to excite epilepsy seems to have occurred to Dr. Todd, as will be seen by the quotation we have given at p. 650:—"They seem to have been brought about by causes operating upon the blood, upon general nutrition, and upon that of the brain in particular, which must have already suffered a good deal by the neighbouring disease of the dura mater."

The following three cases are instances in which epilepsy has occurred in connexion with hereditary syphilis, and in which there is reason to believe that the epilepsy is the result of certain changes in the nervous system, induced by inherited syphilitic taint. In all of them there is, independently of suspicious history, the notched teeth and keratitis, which has, in a vast number of cases, been found to be dependent on inherited syphilitic taint.

In the first of these cases (Case 6) there is unfortunately no description of the fit of epilepsy. In the next (Case 7) the first fit, at the age of four, was followed by hemiplegia (epileptic hemiplegia), and since, the same side has been until very lately the only one convulsed in the fits. In this patient the mental condition is nearly that of idiocy. We shall, in a later stage of our report, introduce cases of idiocy in which there is every reason to believe that the cause was hereditary syphilis. In Case 8 the convulsions were confined to one side of the body. We have alluded to this case in an earlier part of this report.

The following case is copied from Mr. Hutchinson's paper on Interstitial Keratitis in the "Ophthalmic Hospital Reports," vol. i. p. 239:—

Case 6.—Double Keratitis with large Lachrymal Abscess—Epileptiform Fits—Teeth and Physiognomy characteristic of Syphilis—History suspicious, but inconclusive.—Mary Ann D., aged 11, was admitted with double keratitis in an early stage, and with abscess in the left lachrymal sac. In the posterior layer of each cornea were numerous minute punctate deposits of lymph, very closely resembling those seen in cases of syphilitic iritis in adults. There was slight swelling in both knee-joints. The abscess in the sac was laid open, and mercurial treatment prescribed. She was a poor, miserable-looking child, of bad, pale complexion. There were scars at the angles of the mouth. The bridge of the nose was sunken, and the teeth were most characteristically dwarfed and notched. Her mother stated that when an infant the child was puny and excessively restless, and that she had "snuffles" and "thrush" both badly. She was for a long time under Medical care, but did not, as far as I could make out, ever take mercury. Subsequently she had discharge from both ears, which left deafness. Two months ago she was under the care of Mr. Lawrence in St. Bartholomew's Hospital, for pains in the bones and failure of sight. She was liable to severe headache, and occasionally to epileptiform attacks. No direct questions were asked of the mother. The patient was the second child, and she had borne four, of whom the first and fourth had been still-born. A very singular circumstance had occurred in this child's dentition. Her mother stated that the first set of teeth had all fallen out by the time the child was three years old, and that for three years subsequently she was wholly toothless.

Case 7.—Hereditary Syphilis—Notched Teeth and Keratitis—Epileptiform Fit at the Age of Four, followed by Hemiplegia—Subsequent and Severe Attack of Epilepsy—Partial Idiotcy.—Under the care of Dr. Brown-Séquard. Edward R., aged 14. He was quite well until he was three months old, he then had a rash all over him, "sores and boils," for which he was under Medical care for nine months,—he did not use any ointment. He recovered to some extent, but was always delicate. He became able to walk at 2 years of age, and talked very early. At the age of 4 he was paralysed, and ever since he has been subject to fits. Whilst out playing at the age above mentioned he was seized with "a fit," which, his mother said, lasted from eight in the evening until two next morning. It was found afterwards that he was paralysed on the whole of the right side. For three weeks he did not speak, but he soon recovered the use of the right side, although not to walk. His mother says that she had again to teach him to walk. He slowly and gradually recovered speech and power of motion. He had another fit six months afterwards. They gradually increased in frequency, and he now has them every week. Three years ago his eyes were bad. He attended with much benefit at the Charing-cross Ophthalmic Hospital. Both corneæ show the remains of keratitis. The pupils are pretty large, and there is no appearance of iritis. Atropine was not used. His teeth present those appearances Mr. Hutchinson has shown to be very characteristic of hereditary syphilis. He is pale and cachectic-looking, but his nose is not sunken. His mind is evidently very feeble, and his manner is restless and fawning. He cannot read, which may be accounted for somewhat by his imperfect sight and also by want of proper trials to educate him. His memory, especially for recent events, is very bad. When the fit is coming on he gives a scream, the right arm and leg are drawn up, he then becomes insensible, and is convulsed. Until very lately the convulsive movements were entirely confined to the right side, but at present the other side also had been somewhat affected. His mother says that in the fit the mouth is drawn to the left. The duration of the fit varies; it is generally five or ten minutes, but it has been as long as three and a-half hours. He generally sleeps for some hours after the fits. His mother does not seem to suspect any taint, and no direct questions were asked. She has been pregnant ten times, but has only four children living; and, as Mr. Hutchinson has generally found, the present patient is the eldest living; he is also in this case the eldest born. The second born died at the age of eleven months, of what the mother calls "nettle-rash;" the third at the age of five years, of "water on the brain;" the fourth is living, looks healthy, and has good teeth; the fifth pregnancy resulted in a miscarriage; the sixth child born died at the age of one year and ten months, of "water on the brain;" the seventh and eighth were still-born; the ninth and tenth are living and appear quite healthy.

Case 8.—Hereditary Syphilis—Epileptiform Fits with Peculiar Symptoms—Double Keratitis—Characteristic Teeth and Physiognomy.—The particulars of the following case were obtained from Mr. Hutchinson, under whose care the patient was admitted at the London Hospital. Alfred O., aged 19, a well-grown lad, but of characteristic physiognomy and teeth. He states that he had good health until he was about eleven years old, when he became liable to a peculiar form of epileptic paroxysms beginning in the left side. His account of these fits is as follows:—The fit seized him suddenly one day when out walking; his left leg was affected by painful spasm, which in a short time passed up his side. He did not on that occasion lose consciousness. Since the fits have recurred with very varying frequency. Once while residing in the country he was a year without having any attack. All the fits begin by spasm either in the left leg or left arm. The limb attacked shakes violently, and "the muscles are drawn into knots." This is very painful, and after a while he falls and becomes insensible. The insensibility has on some occasions lasted several hours, and he always has sickness and headache on recovery. He has never experienced the slightest spasm in the right side of the body. Most of his attacks are not attended by unconsciousness, but consist only of spasmodic contortions of the leg or arm, which, after from three to five minutes, cease, and the limb drops. Any slight

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excitement, a false step in the street, a sudden noise, etc., will bring on these spasms. He feels a constriction about his throat during them, and is obliged to tear open his neck-handkerchief. He is not aware of the existence of any particularly irritable spot, pressure on which will cause the spasms. His muscles are well developed, and I can discover no wasting or want of symmetry. *Eyes.*—Until a year ago his sight in the right was perfect, the left being not so good. He was then attacked by interstitial keratitis. It began in the right and soon afterwards affected the left also. He attended at Moorfields for some months. At present both corneæ are diffusedly opaque, the right much the more so. He can see to read with the left. *Teeth.*—The teeth are as typical as any I have ever seen. *History of his Family.*—His father died ten years ago. His mother is still living. An elder sister, who, if she had lived, would now have been 24, died of phthisis a few years ago. The second child died young. The third, a boy, is now living, aged 21, is in bad health, has, according to report, malformed teeth and a "cataract" in one eye, for the latter he has been under much Surgical treatment. He was not born with it, and it did not form until he was some years old. The fourth, a girl, died young. The patient, Alfred O., is the fourth and youngest living. One younger than himself died. There is a second family of young children. Alfred O. is well-grown; bridge of nose good; head symmetrical; skin thick, yellow, and pitted; deep fissures in lips. He has been under my care for a month, and thinks he has been much better since taking the iodides of potassium and iron. He had previously been under Dr. Parker's care for the fits. He has been accustomed to work in tobacco, but does not think it injures him.

J. H. J.

Medical Times and Gazette.

SATURDAY, JUNE 22.

THE ROLL OF THE ROYAL COLLEGE OF PHYSICIANS.

The Royal College of Physicians has lately sanctioned the publication of the first part of the Roll of its Members. This extends over the years included between the date of their incorporation by charter to the end of the seventeenth century. It is a production quite as much out of the circle of ordinary criticism as the daily list of births, deaths, and marriages. A mere nebulous aggregation of biographical particles connecting the men to whom they relate with the Royal College is all that it can be called. The lens of the compiler, of course, shows the bright points of this milky way a little out of proportion, and bends the rays so as to get all possible reflection on the venerable institution. It has a destiny of its own. It will float indefinitely in the hazy atmosphere of Pall Mall, and, perhaps, be a sufficient stimulus for the negative state of existence peculiar to that region. To the "democratic masses" of the Profession, who, in the tumultuous whirl of the business of life sometimes swing into perturbing nearness to the presidential presence, it is a cold abstraction. They can feel no abiding interest in it. Now that it is just newly above the horizon they may, perhaps, be tempted to glance at it as they would at any other passing curiosity, with such assistance as we may give them. Before the Royal College can hope for more than a chilly indifference to its records, or an ungracious recognition of its present phase of being, it must rouse up within itself something like the warmth of brotherly feeling towards the rest of the Profession. Or if it cannot condescend to this, it must, if such a feat be in its power, give some positive evidence of sustained superiority of learning and scientific achievement. The eye will sometimes wander from the canvass over the fireplace of the library to the chair of state, and the transition from the classic volumes on the shelves to many of the modern books on the table requires too painful an amount of accommodating power to make comparison a matter of congratulation. There is no natural disinclination among the "democratic masses" to admire greatness, and reserve would soon thaw into cordial co-operation for common good. But men will not bow the head to shadows, and hand must grasp hand before any good can come of the meeting.

However, our concern is at present with the College Roll—to winnow out for the amusement of our readers a few of its curiosities, and to see whether any of its contents have any bearing on questions which are now interesting.

There are some among us who say, and that not in the legitimate way of domestic grumbling, but publicly, that the Profession is not duly honoured; that Royalty withholds dignities; and that the public is slow to acknowledge its obligations. They would have peerages, and pensions, crosses, ribbons, ovations, and statues. War, politics, law, divinity, and daring adventure lead to these things. The path of Physic is a *cul-de-sac* with nothing at the end or bottom but—guineas—and not enough of them. This querulousness is neither just nor well-founded. Physic has its position and its rewards. It is after all only a wheel within wheels. The Profession is neither the mainspring of society nor the balance-wheel of the State. Its main business is with the individual atoms of the race. It ticks off their entrances and exits, and smooths their passage through existence. Its work is for the most part private, and its compensation is proportionate and of like kind. But it is none the less real and substantial. Such dignity as befits a Professional body of men it gets, if not in fair measure. Let us appeal to the Roll for proof that it is so. First, as to honours. From the year 1518 to the close of the next century, the College admitted 724 members; of these 37 became either knights or baronets. Is this a mean proportion of the marks of the Royal favour? One Physician won his spurs every five years. One in every twenty members became Sir John or Sir Thomas, as well as M.D. We look forward to the day when an occasional peerage may reward some Jenner for service to the State; but should we allow the most inveterate grumbler to find fault with five per cent. of baronetage and knighthood in a single College? In early times Church preferments coalesced kindly enough with the Doctorate, and Fellows of the College often found themselves prebends, canons, or possessors of rich rectories. Dr. Warner was not singular in being, according to the record of him, "a great intruder into ecclesiastical benefices and dignities." After being appointed Professor of Physic at Oxford, and Warden of All Souls, he became successively Prebend of Winchester, Archdeacon of Cleveland, and soon afterwards Archdeacon of Ely, then Prebend of Ulfcomb, in the Church of Sarum, and died Dean of Winchester, deserving, no doubt, his reputation as "vir senior, doctus, et bonis moribus." How often does the College expect such a shower of good things to fall upon one of their number? Later on, when times and opinions were changing, no one objected to the same person suiting his convenience or interest by being at one time Popish priest or Roundhead divine, at another Protestant or Royalist elect of the College. Kings, queens, princes, prelates, and nobles, all vied in doing honour to the "man of Physicke." The great Elizabeth could write letters in her queenly Latin to the Czar and Czarina in praise of one of her "esteemed Physicians," assuring her beloved sister that Dr. Jacob "knew more about the situation of lying-in women than even the midwives themselves." "Eum, ut pari cum gratiâ a nobis accipias, et honore merito prosequaris, etiam atque etiam rogamus." James I. writes with his own hand to recall Mayerne from France, and even sends a messenger to conduct him over. On his arrival he was honoured with a private audience, appointed First Physician to the King and Queen, and was

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soon placed at the head of the Profession in England. In November, 1612, we find him in attendance with other Doctors upon Prince Henry, the King's eldest son, and unable to bring his colleagues to agree to his plan of treatment. "His Majesty then gave leave and absolute power to Dr. Mayerne to do what he would of himselfe without advice of the rest." He was entrusted by James with some foreign affairs of importance, and afterwards received the honour of knighthood. During the reign of Charles I. he was continued First Physician, and held nominally the same appointment to Charles II., after the execution of his father. At length, "full of years, wealth, and reputation," he died at Chelsea. As we find it expressed in the inscription on his monument, "Quid de Mayernio plura? Mayernium dixeris, omnia dixeris." All know the honourable terms upon which Harvey lived with his Royal master and his family. Quite as marked, though not so honourable, was the position of Sir Alexander Frazier in the Court of the next reign. He was in attendance on the Royal party at St. Germaine's in 1651 and 1652, and was much trusted by the King in a political no less than in a professional capacity. At the Restoration he returned to England, and adapting himself without hesitation or scruple to all the wants and wishes of the Court, attained to a degree of influence with the King, unequalled, perhaps, in the history of the Profession. Thus Pepys writes in his "Diary,"—"Dr. Pierce tells me, when I was wondering that Frazier should order things with the Prince in that confident manner, that Frazier is so great with my Lady Castlemaine and Stewart, and all the ladies of the Court, in helping them to slip their calves when there is occasion, and with the great men in curing them, that he can do what he pleases with the King in spite of any man; and upon the same score with the Prince—they all having more or less occasion to make use of him." So much for what Royalty has done. If the favours were personal, they came, deserved or undeserved, through the Profession, and the grievance is that the Profession is neglected; not, of course, that the grumblers themselves do not get "life peerages."

As for riches, we may take the matter two ways: we may see what Dr. Munk says directly, and we may get evidence out of him inferentially. In writing his notes, he has found these very riches a real embarrassment. It is quite amusing to trace his ingenuity in hunting up new terms and phrases to express the almost universal fact that his subjects made money. Thus some are said to have become possessed of manors, some retired into the country, some died very wealthy, one finished his race with honour and success; Prujean simply was very rich; Alston accumulated a handsome fortune; Bidgood, of Exeter,—renowned and sought after on account of his accuracy in diagnosis,—"Bigodi sagacitatem et in diagnosticis peritiam," we are assured on authority realized a splendid fortune; Short got riches as he pleased; Sherwood practised many years with the highest success and reputation; Thorius practised his faculty with good success; till at length, in despair with the monotony of the record, quotation is the only resource, and we are told from Wood that Dr. Willis "in a very short time became so noted and so infinitely resorted to for his practice, that never any Physician before went before him, or got more money yearly than he." Such facts are almost as plain as figures. Plainer still are the annals of the College. Who will give them credit for acknowledging unrealised munificence? We may be sure that the record of bequests follows the receipt in form. And what is the meaning of so much monumental inscription? Every few pages are adorned with an epitaph. The tears of surviving poverty seldom crystallise into memorial marble. The "nati denatique," "ante obitum felices," "hic subtus jacentes," "medici in tumulo," "sub marmore reconditi," "Anglorum inter Medicos Hippocrates," must have left something substantial behind them besides their good name and fame to secure the services of so much ingenious scholarship. This alone, if it does no more, gives a sufficient quietus to the complaint of bad pay.

Dr. Munk did not undertake to write the romance of the College. He only throws a few shadows on his canvass, which show what scenes might be conjured up by a skilful workman. Among the ills that the Fellows are heir to, poverty, as we have said, is not much felt. Still, by way of necessary exception, we find mention of a poor Doctor's widow to whom the College allowed a pension, and of a Doctor Maucleer who was accepted as a candidate *in formâ pauperis*, and admitted *Permissus intra urbem* under a promise to pay future fees, if able. But turning over the Roll such unexpected incidents as the following come into view:—One member, a great scholar, whose "free handling" of subjects of which his own College could take no notice, brought upon himself the wrath of divines of all degrees. His "Grand Essay" was attacked on all sides, as we know, by what is going on at the present time, the clergy can attack "Essays" of which they are afraid, and the House of Commons at length came to the rescue, as they will not so accommodatingly do in 1861, and ordered his books to be burnt by the common hangman, as containing doctrines contrary to the Articles of the Church of England, and opposed to the Christian religion. Another found his way into the Star Chamber for writing and publishing seditious, schismatical, and libellous books against the hierarchy and the Church, and was condemned to a fine, the pillory, cropping of his ears, and perpetual imprisonment. It is only right to add that this sentence was afterwards reversed by the House of Commons, and he was ordered to receive £5000 as a reparation for his losses out of the estates of those who had voted against him in the Star Chamber. Like many others, however, in the same predicament he never got the money. Dr. Clench was mysteriously murdered in a coach in which he was taken out under pretence to see a patient. Atslowe was imprisoned and racked for meddling with the cause of the unfortunate Mary Queen of Scots. Another was hung for some felony, and Dr. Temple, who was Physician to the Duke of Monmouth, got executed for treason. During the plague of 1665, Dr. Burnett, with several others of the College, and a whole party of Surgeons, Apothecaries, and Chemists suddenly lost their lives through the excess of their pathological zeal. "Some say," writes Tellison to Dr. Sancroft, "that these, in a consultation together, if not all, yet the greater part of them, attempted to open a dead corpse, that was full of the tokens, and being in hand with the dissected body, some fell down immediately, and others did not outlive the next day at noon."

We have only room to touch upon one other topic. Everywhere jealousy and self-seeking. It is the same with bodies corporate as with individuals. We begin by taking righteous care of the things we have in trust. Our private interests are soon found to be running in the same track. Trespassers are a great evil and must be punished. At last we grow envious of those doing the same things as ourselves, and, perhaps, a little more prosperously,—say sporting over the same manors, or practising physic very much as we do. As it is now so it was in the beginning. As soon as the College got its Charter, it made great efforts to keep up the distinctions thus created, and to defend the doctrines which it had for the time adopted. In this way we find that John Geynes, M.D., was cited before the censors for impugning the infallibility of Galen. On his acknowledgment of error, and humble recantation signed with his own hand, he was received into the College. Soon after this little adventure the College flew at higher game, and reproved the University of Oxford, by letter, for granting the honours of the Baccalaureate in Medicine to two ignorant, unlettered, and incompetent persons, one of them, Simon Ludford, an apothecary, the

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other a coppersmith. The University supported their men. But, luckily for the College, the Inquisition of Cardinal Pole for the reform of collegiate abuses was ready to lend an open ear to their complaint. So they forthwith furnished to the Visitors the following specimen of the pretensions of one of the competitors for practice:—"Cujus infantia cum suggessit, ut quomodo *corpus* declinareter, exigeremus, respondit, *hic, hæc, et hoc* corpus, accusativo *corporem*," adding "egregius certè ex Universitate, medicus cui humana vita committeretur." The College had justice done to its public spirit. The University was interdicted from a repetition of this licence, and the coppersmith gave up tinkering with physic. The Apothecary, however, was made of better metal, and worked himself up by some of those mysterious processes so well understood at Exeter-hall, till, at last, the College was obliged in fairness to admit him to the Fellowship. April 7, 1563, "In Comitiis extraordinariis, ascriptus est in Collegium Simon Ludforde, Bedfordiensis, medicinæ doctor Oxon." Dr. Goddard, 1646, is praised as a warm supporter of the rights of his order, and a fearless exposer of the abuses of the Apothecaries. By-and-by it is found good policy to let men of large practice have a licence with conditions. Robert Savorie is the Forbes Winslow of his day; and "by reason he may be useful to the commonwealth," the President and Censors give him "leave to practise with distracted people, and in some particular maladies, he promising to call to his assistance in difficult cases, some of the College, and behaving himself well in all." Another being prosecuted and having against him a verdict *de praxi illegitimâ*, was examined and admitted into the College with a requisition to "take great care and caution in his practice, and in difficult cases to call to his assistance some of his colleagues." But the world has grown beyond this chartered and powerful selfishness; and now a-day the cry in the College is that the "democratic masses" of the Profession stand aloof—that they do not seek consultation in the old-fashioned, orthodox way. No wonder. The tables are somewhat turned. We make no odious comparisons of skill; but when Members of the College, holding the position of Hospital Physicians, and assuming among their professional brethren the position of Consultants, are yet known by the public as rivals of the Surgeon and General Practitioner, taking cheap Midwifery, performing Surgical operations, and visiting repeatedly or at an incredible distance for a single fee or half a fee, we think we are fairly entitled to a counter verdict against them *de praxi illegitimâ*, and fully justified in leaving them to the penal endurance of unconsulted feelessness, in the very words of one of their own Presidents, "*cum admonitione*, ut sibi, si sic practicare pergerent, diligenter caverent."

THE WEEK.

From a brief summary just published by the Registrar-General we learn that during the decennium 1851—1861 the population *belonging* to England and Wales, including the Army, Navy, and merchant seamen, abroad and at home, has increased from 18,054,170 to 20,223,746; the increase amounting to 2,169,576 persons. Excluding the Army and Navy, the number of *men* is 9,758,852; of *women*, 10,302,873. The *positive* increase has been larger than during any period of ten years during the century, for, reckoning the six decennial periods since 1801, the positive increase has in round numbers been 1,200,000; 1,700,000; 1,800,000; 1,900,000; 2,000,000; and 2,100,000 in the six respective decenniums up to 1861. The relative increase, or increase per cent., of the population, was 14 in the ten years from 1801 to 1811; it mounted to 16 in the ten years to 1821; but since that time has been 15, 14, 13, and 12 at the succeeding decennial periods respectively. The number of inhabited houses has increased from 1,575,923 in 1801, to 3,745,463 in 1861. There are five English and two Welsh counties, whose population has decreased, viz. Cambridgeshire has suffered a loss of 9455; Norfolk, 7292; Wilts, 4778; Rutland, 1124; Suffolk, 964; Anglesey, 2781; and Montgomery, 260. But in spite of the decrease of population, the number of inhabited houses has increased in these as in other counties. In nine English and five Welsh counties, viz. Derby, Durham, Essex, Hereford, Kent, Monmouth, Hampshire, Stafford, Westmorland, Brecon, Denbigh, Glamorgan, Montgomery, and Radnor, the men outnumber the women. The greatest increase has been in Lancaster, 397,508; Middlesex, 319,195; Yorkshire, 265,726; Surrey, 147,603; Stafford, 137,868; Kent, 117,909; Durham, 118,021; and Glamorgan, 85,902. If we now look at the metropolitan parishes, we find that St. Pancras bears the palm of numbers, 198,882; but that the greatest increase belongs to Kensington, which with 66,459 new inhabitants, numbers now 186,463. The old central urban parishes all show a decrease; the City now has a population of 45,550, whereas ten years ago, it had 55,932; and the Strand, Holborn, St. Martin's and St. James's Westminster, St. Giles's, and Whitechapel, all show decrease.

The theory that where any given disease is most prevalent, there Nature has planted the antidote most abundantly, receives some support from the fact of the close proximity of the Cinchona forests of Peru, to the fever haunted swamps of the Isthmus of Panama. The manner in which the remedy is used as a preventive in the West Indian Packet Service, is thus described in Mrs. Bromley's agreeably written "Woman's Wanderings in the Western World:"—"I have been watching the concoction of a shocking dose which the Doctor is preparing for our benefit in crossing the Isthmus, which is at present much infected with 'the fever,' so-called, and which, if it once gets hold of you, they say, is rarely, if ever, to be shaken off. Dr. T.'s nostrum is a bottle of sherry in which he has infused such a quantity of quinine, that it will demand a great deal of courage, both moral and physical, to take his prescribed quantity, which is a wineglassful every five miles."

Again we have to notice a case of accidental poisoning. On Sunday, Mrs. Peel, wife of the Dean of Worcester, took by mistake a large dose of laudanum from a bottle which she supposed contained another medicine. The lady has happily recovered from the dangerous effects of the narcotic; but the lesson should not be lost, and we are glad to find that Messrs. Savory and Moore, with the most praiseworthy perseverance, are urging upon the Profession and the public the necessity of using a peculiar form of bottle for all dangerous medicines. The general adoption of this proposal would necessarily lead to the prevention of many dangerous mistakes in dispensing and administering powerful medicines and poisons.

It is well that we should occasionally "see ourselves as others see us," and the following remarks by the *Gazette Hebdomadaire* may be useful in showing what our French brethren think of the question between the Physicians and the Apothecaries. Our Paris contemporary remarks:—

"The Apothecaries' Company claims the sole right to confer the legal privilege of the exercise of Pharmacy, and brought an action in the Vice-Chancellor's Court to prevent the College of Physicians from granting diplomas to *General Practitioners*. A General Practitioner is a Doctor who adds the sale of medicines to the profession of Medicine. The College of Physicians had no trouble in proving that the Charters of 1509 and 1522 guaranteed to them the power of reforming their laws as they pleased, and that if they had in fact given up the sale of medicines—if they had even for-

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bidden such sale by their Members—they had not lost the right to restore the power to them, and this they thought proper to do by a resolution of April 8, 1860. Notwithstanding the arguments of the Attorney-General, the Vice-Chancellor decided against the Apothecaries, and now the *Physicians*, who up to this time have held themselves superior to their rivals by keeping themselves free from trade, have lowered themselves spontaneously to a common level. This modesty, this humility, simply shows to what a degree of *necessity* the Medical body in London has arrived. It is evident that if the *Physicians* had been able to preserve their scientific rank, they would not have been obliged to add to their incomes the profits resulting from the sale of medicines, and they would have abandoned this sale to the other three Corporations. In France the law permits, or rather does not forbid, the plurality, provided it be exercised with two distinct diplomas. But it is a remarkable fact that no one takes the licence, and that those who profit at the same time by the practice both of Medicine and of Pharmacy do so either by breaking or by eluding the law. For instance, some Pharmacists give advice, the most evident result of which is to pass off their syrups or ther pills; and some Physicians place themselves in the pay of the Pharmacists, and feel the pulse in a room behind the shop. Those who call themselves Homœopaths sometimes object to place their globules by the bedside of the patient. We say *sometimes;* but generally they carry their case (*sac à malice*) with them, and give the specific *gratis*, which may be anything or nothing, so far as anybody knows. This is a serious matter we all agree, exceptional in our country, though the rule in England, and we should be glad to see the English Medical press express some opinion like our own."

Our own opinion on Profession *v.* Trade has been repeatedly brought before our readers, so that we need not do more than leave the remarks of our French contemporary as another instance of the hopelessness of expecting the arrangements of our Medical Institutions to be understood on the Continent. The "other three Corporations" referred to above are the Society of Apothecaries, the University of London, and the College of Surgeons. The writer will be somewhat astonished to learn that one condition of receiving the diploma at the hands of the College of Physicians, in place of the Apothecaries, is abstaining from the sale of medicines! The numerous other errors in the passages quoted we need not point out.

The management of many of the lesser details of London life is very defective. The arrangement for carting away refuse of all kinds may be an example. Every house has a dust-bin or ash-pit of great size, affording means of accumulation for all sorts of offal, such as cabbage leaves and lobster shells, which soon become offensive. When the pit is full, the contents are removed in broad daylight, by means of baskets, the emptying of which causes a quantity of offensive dust to be scattered for the benefit of foot passengers, while the carts which serve as receptacles linger about the streets. Meanwhile, although the inhabitants pay for its removal, the dustmen either refuse their services, or perform them in a slovenly manner, unless they receive a *douceur*. The surface of the streets alternates between blinding dust and a deep mud, which is splashed over the passengers by the vehicles, and stinks in the hot sun. The water is distributed too lavishly, and not frequently enough, and the streets should be cleansed of dust before it is laid on. With Macadam there may be some excuse for dust; but there can be none when the road is paved with granite, which might be kept as clean as a kitchen floor. If we are asked to define the peculiarities of London air, they consist in the effluvia from the uncleansed streets, the effluvia from the dust-bins in the areas of houses, the effluvia from sewers and gully-holes, and those hateful "ventilating" openings in the centre of the streets; the effluvia from mews, stables, and cow-houses, and from the immense quantity of sulphureous gas burned. All these sources of impure air are capable of mitigation. So is the smoke; and so are the bone boiling and other offensive trades. It is but due to the Medical Officers of Health to say, that these evils exist in spite of their protest, and that the difficulty is partly a commercial one,—contractors do not care for the dust, and the ratepayers do not care to pay for its frequent removal.

The Parsees resident in London, Liverpool, and Manchester, have petitioned the House of Commons, against the exclusion of any of their number, by reason of race or creed, from offices the duties of which they are qualified by their education and ability to discharge; an exclusion utterly at variance with the tenor of the Queen's Proclamation, when she assumed rule in India. The testimony of Dr. Walshe, Mr. D. O. Edwards, Drs. Jenner, Garod, Harley, and Williamson, of Manchester, is all in favour of their capacity to serve in any climate. But, as we said before, to confound the Parsees with any low, degraded semi-savages, would be no more than an outrage on ethnology, if it were not also an indication of the same feeling which we English denounce when exhibited by the Anglo-Americans towards the Africans.

The Legislature of Jamaica has appointed a Commission to inquire into the past and present management and condition of the Public Hospital and Lunatic Asylum. An immense number of charges are brought against the management by Dr. Bowerbank, including every kind of mismanagement, and peculation, and cruelty to the patients. It is altogether too early to give an opinion on the merits of the case.

The War Office has now determined "to admit to examination for commissions all persons of suitable age, and moral character, who are borne on the Medical Register, as qualified to practise Medicine and Surgery." It has determined "to cancel the preference hitherto given to persons having University degrees, and in future all persons borne on the Medical Register will be considered equally qualified to compete for those appointments." Lord Herbert is "satisfied that the competitive examination affords sufficient security for obtaining competent men;" and the candidates need not have diplomas or licences from two separate Bodies.

As the result of the petition presented to the Emperor by the Society for the Prevention of Cruelty to Animals, an order has been issued by the Minister of Agriculture and Commerce positively interdicting the employment of living animals for physiological experiments and practice in operations at the Veterinary Schools. The Director of the School at Alfort is using every endeavour to obtain the withdrawal or modification of this decree. It is probably too sweeping a measure; but when we find a respectable journal like the *Gazette Hebdomadaire* defending the performing of operations on living animals by students, on the ground of accustoming them to the struggles of the suffering brutes, it is obvious that interference of some kind was called for. No doubt the French feel a little sore that the "*fibre delicate des Anglais*" should have had influence in this matter; and it certainly is to be regretted that they have laid themselves open, by this cruel indifference to animal suffering, to the meddlesome interference of a body of persons who pronounce, by the mouth of a Bishop, that the discoveries of Hunter, Bell, and others, are not worth the pain they cost, and that the cancer of the tongue which killed Reid may be looked upon as a punishment for the tortures he had inflicted on animals. Let our neighbours, who are so fond of interminable discussions

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upon points concerning which no one can see the bearings but the orators, bring this practical subject before the Academie de Médecine, and state openly the reasons which they think justify a practice which, until explained, seems simply horrible.

The Members of the South Hants Medico-Chirurgical Society entertained many of their Medical friends from the Metropolis and the neighbouring towns at a delightful pic-nic in the New Forest last week. It is not very often that hard-working London men are able to steal a holiday to enjoy with their country friends, and when they do, the pleasure is enhanced by its rarity. In this case, lovely scenery, fine weather, the most hearty hospitality, and some of the very best after-dinner speaking we ever heard,—especially from Mr. Bradshaw, a Southampton clergyman (brother of one of our Victoria-Cross Medical heroes), and from Mr. Farley, Editor of the *Hampshire Independent*,—all combined to make the meeting as complete a success as the worthy President, Dr. Dusautoy, the Vice-Presidents, Drs. Bushnan and Wiblin, or any of the Fellows, could possibly desire. The non-professional visitors were well represented by Mr. Churchill and by the Mayor of Southampton. It would be well if town and country members of our Profession were more frequently brought together by such social gatherings.

Important questions in Medical ethics and Medical etiquette are now before some of the Medical Corporations. Dr. Copland brings "Professional Intercourse with Homœopaths" before the College of Physicians, and the following memorial of some highly-distinguished Fellows of the Irish College of Surgeons is under the "serious consideration" of the Council of that body:—

"We, the undersigned Fellows of the Royal College of Surgeons, being strongly of opinion that some provision should be made in the rules or bye-laws of the College, for the purpose of preserving amongst its Members a high Professional standard, beg to bring the subject under the notice of the Council, and request that they will take such steps as they deem necessary for the purpose of providing their Members with fixed laws for their guidance and direction, and also for punishing, by means of censure or otherwise, any of their body who are themselves found to act in a glaringly unprofessional manner, or who offend by meeting in consultation persons who practise homœopathy or other forms of quackery, or Practitioners who seek for business through the medium of public advertisements. And we further request that the Council will confer with the College of Physicians, with a view of coming to an understanding that the Members of each College shall, in future, mutually respect and give force to the act of the other, if at any time the unfortunate necessity should arise of visiting a Member with censure."

It is high time that our own College of Surgeons also "seriously considered" the subject; for it is very hard if young Surgeons anxious to maintain their fair fame, refuse to "serve God and Mammon," and then find Members of their own Council doing what juniors dare not do even if they would. Nor is it fair to blame these seniors for acting up to some imaginary rule of their own consciences. What is wanted is a distinct and definite Professional Code, which all must obey.

Before this number is in the hands of our readers, the elections at St. George's Hospital of Mr. Prescott Hewett and Mr. Pollock to the Surgeoncies, and of Mr. Henry Lee and Mr. Holmes to the Assistant-Surgeoncies, will no doubt be completed. The lamented death of Mr. Gray, just as the position for which he had been working so long was opening to him, led at first to the belief that Mr. Athol Johnson would come forward. On his determination not to stand, it was thought for a day or two that the field would be an open one, and several young Surgeons were prepared to enter on a canvass. But Mr. Henry Lee, an old St. George's man, was induced to leave King's College Hospital and return to his *Alma Mater*, and his claims were so strong that the election may be said to have been uncontested. While congratulating the newly appointed Surgeons and Assistant-Surgeons upon attaining their well-earned and honourable positions, we must not forget to record the feeling of general regret expressed at the great loss the Profession sustains by the death of Mr. Gray. We do not remember another instance in which so young a Surgeon has attained such varied honours. He gained the College Triennial Prize "On the Nerves of the Eye" in 1849, only a year after he became a Member of the College. Four years later he obtained the Astley Cooper Prize, "On the Structure and Use of the Spleen." His papers in the Philosophical Transactions had led to his election as a Fellow of the Royal Society; and now that he has gone, "young in years, full of honours," we are not disposed to enforce the gloomy lesson "vanity of vanities," but would rather point to the works he leaves behind him as encouragements to others to follow the path by which he gained the respect of his contemporaries, and an enduring place in the Roll of Medical Worthies.

Mr. Hubbard's Committee on the Income and Property-Tax has collected evidence from Medical men which ought to induce the Government to lower the tax on Professional incomes. Last Friday Mr. Fergusson and Dr. Webster, representing the Medical Registration Association, were under examination by the Committee for upwards of three hours.

THE COMPOSITION OF THE SUN,
AND
CHEMICAL ANALYSIS BY THE SPECTRUM.

The gorillas, and M. Du Chaillu's adventures, have formed the leading topics of the scientific gossip of the season. But they have not been without a rival; for the curiosity of the thinking part of society has been almost as much excited by accounts of new discoveries of the composition of the sun, as by those of the discovery of the nearest relations of the human race in Central Africa. The interest excited by the discussion on the physical composition of the sun, at the meeting of the British Association at Oxford, last year, has been so kept up by the brilliant account which Faraday gave at the Royal Institution, of the results of the observation of the total eclipse in Spain, as well as by Professor Roscoe's Lecture on March 12, on Bunsen and Kirchhoff's researches; and by Professor Tyndall's, on June 7, that we are tempted to give our readers such an account of the matter as our limits allow.

The sun is an enormous mass, or *nucleus*, of matter, heated to an inconceivable degree, and luminous in proportion; and it is surrounded with an atmosphere of flame. This, under the influence of the rotation of the sun on its axis, is subject to variations of temperature, and to currents passing from the equator to the poles and back again, like those in the atmosphere of the earth; and not less to tropical storms and whirlwinds of flame. Most remarkably do the photographs of the late total eclipse show this flaming atmosphere as it appeared at the edges of the darkened disc, as well as the existence of certain huge outlying masses of flame, which hover over it, apparently detached like clouds.

The light of the sun, as is well known, can be separated by the prism into seven rays of colours, known as *prismatic*, and these present a number (nearly 600) of dark lines parallel to each other, which, from the name of their discoverer, are called Fraunhofer's lines. These lines are constant, or fixed, and always occupy the same place in the spectrum; and they are accurately catalogued and numbered.

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Having set forth these facts about the sun, let us turn to some few elementary doctrines, very clearly stated by Professor Tyndall, and showing the exact harmony which exists between light and sound, and the similarity of the condition which generates either sensation. Heat and light are propagated by means of an ether which fills space, and whose existence is proved by its retarding the speed of comets. They consist in certain movements or vibrations of the atoms of bodies. When these vibrations are communicated to the surrounding ether, they are said to *radiate*. When they are communicated to and arrested by any other body, they are said to be *absorbed*. Some gases—oxygen, for example—do not give off heat by radiation; others, as olefiant gas, do so largely. The same gases which radiate also absorb it, and *vice versâ*. This was shown very beautifully by experiments, in which a current of oxygen passing over a heated copper ball did not affect a thermo-electric pile, while a current of heated olefiant gas did so; and by a counter experiment, showing that a sheet of oxygen gas does not arrest the heat radiating from a heated surface, but allows it to pass through, while a sheet of olefiant gas arrests, absorbs, and cuts off the heat, and does not allow it to pass through. The difference in the relation of these gases to heat was stated to depend probably on mechanical principles. The atoms of simple bodies, being probably simple spheres of extreme tenuity, allow the vibrations of the ether to pass over them; while the atoms of compound bodies, being complex, arrest them mechanically, and are capable of communicating them by radiation. The more complex the gas, the greater does its power of radiation and absorption of heat become.

As sound consists in the coarser vibrations which affect the auditory nerve, so light consists in other subtler vibrations which are taken cognisance of by the optic nerve. The intensity or loudness of sounds depends on the *extent* of the vibrations or on the magnitude of the wave, and the *pitch* on the number of vibrations per second. Just so, it seems certain that there is a numerical ratio between the breadth of the vibrations of the luminiferous ether, which constitute colours. But any vibrating body—the pendulum of a common clock, for example—is able to be set vibrating by any other body vibrating in equal measure. So a string in a piano will often resound to a similarly sounding string. So also any luminous particles absorb the vibrations of any similarly luminous particles which impinge upon them.

The vapour of every metal, heated to incandescence (as when a solution of soda in alcohol is burned) yields light of a peculiar colour, having definite refractive powers, and when passed through the prism, appearing in the form of one or many bright, luminous bands, at a particular part of the spectrum. The commonest example is sodium, the incandescent vapour of which, in any combination, yields a homogeneous yellow light, which, passing through the prism, appears as a yellow band in a definite place. Every other metal produces its own band or series of bands in a definite part of the spectrum, and no two metals agree in the colour, the number, or the place of these bands.

Now for the practical results of these purely scientific details. First, by these means—that is, by observing the exact place, number, and colour of the luminous bands produced when any metallic substance is so heated as to rise in vapour and to shine as flame does—a new instrument of chemical analysis is placed in the hands of the philosopher. It is in its infancy yet, but it is very possible that we may see it used for the determination of the presence of metals. Any one who has seen the instrument exhibited by Mr. Ladd, will not doubt this. Any number of metals may be mixed, and yet their flame will give all the bright bands produced by each separately. Result the second is, that at least two new metals have been discovered. For the residue after evaporating certain mineral waters, produced by its flame two bright blue lines, not referrible to any known metal; and the substance, submitted to analysis, yielded a new metal, which from its coloured flame has been called *cæsium*. Another new metal has been found, which, from its red lines has been called *rubidium*. It has been discovered, further, that many metals, once thought rare, are really very widely diffused, though in extremely minute quantities. Lithium is an example. Professor Roscoe tells us that it is found in most rocks; in sea, river, and Thames water; in the ashes of tobacco and most plants; in milk, human blood, and flesh. The third result is the demonstration afforded of the chemical composition of that atmosphere of flames that envelopes the sun. White light produces a spectrum of the seven colours. The flame of any given metal produces one or more bright coloured bands only, and not an entire spectrum. When an intense white light is passed through the light of a metallic flame, a dark line is seen, in the exact situation of each coloured band. When, for instance, a soda flame is placed before the electric light, a dark band is seen in the yellow part of the spectrum where a bright yellow band would have been if the soda flame had been there singly. The fact being that the yellow rays of the white light are absorbed by the isochronously vibrating particles of the soda flame. Now the sun has a nucleus, yielding an intense white light, like the electric lamp; and it has a less intensely luminous atmosphere of flame around it; and its spectrum contains dark lines; and these dark lines coincide in place and number with the dark lines produced when certain incandescent metallic vapours are put before the electric light,—therefore the flaming atmosphere of the sun contains these metals. Iron, sodium, magnesium, and nickel exist there largely, whilst it seems that silver, copper, zinc, aluminium, cobalt, lead, and antimony, are probably absent. In addition to the knowledge thus certainly obtained, a very probable hypothesis may be formed of the nature of the spots in the sun. From the immense magnetic disturbances with which they are associated, they are probably masses of iron, in a cool and non-candescent state, precipitated during the fluctuations of temperature which accompany the tornadoes that occur in the tropical regions of the sun's atmosphere.

REVIEWS.

Traité Clinique et Pratique des Fractures chez les Enfants. Par le Dr. A. Coulon, Ancien Interne de l'Hôpital des Enfants, etc., etc. Revu et Précédés d'une Préface par le Dr. Marjolin, etc., etc. Pp. 264. Paris: 1861.

(*Clinical and Practical Treatise on Fractures in Children.* By Dr. Coulon, etc., etc.)

We gather from this work, as well as from the preface which Dr. Marjolin has contributed, that it is based upon the series of notes which M. Coulon kept during the period of his service as *interne* at the Hôpital Ste. Eugénie. Such an achievement is in the highest degree creditable to M. Coulon, and is calculated to be of use to his professional brethren. The subject is, fracture during childhood; during which epoch these injuries differ from such as affect older persons, both as regards the bones affected by preference, the time required for the cure, and the possible complications. In M. Coulon's experience, out of 140 cases of fracture, 36 were of the forearm (*i.e.*, both bones) 5 of the body of the radius, 6 of the inferior extremity of that bone, and 3 of the ulna. No case occurred of fracture of the olecranon, of the neck of the radius, or of the coronoid process. The femur was broken in 26 cases, and the clavicle in 21; the ribs only once, and the lower extremity of the fibula not once. Rachitis is a frequent predisposing cause and complication of fracture in children, and a hindrance to the union. Disjunction of the epiphyses is by no means different from fracture, in cause, symptoms, or treatment; in fact, it is not a separation of parts merely in conjunction, as is sometimes imagined, but is to all intents and purposes real fracture. The slightness of the cause required to fracture bones attenuated by scrofula or rickets, is illustrated by the cases of miserable children, one of whom died with fracture of both thighs and the humerus, *without rupture of the periosteum;* another child, in whom the neck of the femur was broken, partly within, partly without the capsular ligament, during an attempt to straighten the limbs after hip disease; and cases are quoted of multiple fracture during intra-uterine life. A case of exuberant growth of callus is also recorded. The incomplete, or *green stick* fracture, especially of the forearm, is illustrated by plenty of examples; and particular attention is given to the fractures of the humerus above the elbow-joint, which are sometimes overlooked, and never without risk to the future movements of the joint.

These hasty notes will show the character of M. Coulon's treatise, which we commend to the perusal and imitation of all our younger brethren. We especially commend to their imitation the logical precision, the minute classification, and

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abundance of details, which characterise this, as well as other French works; and which, though leading to a vicious prolixity if in excess, are yet valuable as evidence that the powers of observation, and of reflection, have been submitted to a systematic training.

Turkish Bath Pamphlets:—"The Eastern or Turkish Bath," by ERASMUS WILSON, F.R.S. "The Anglo-Turkish Bath," by YORK JAMES MOORE, M.R.C.S. (Torquay). "The Uses and Abuses of the Turkish Bath," by EDWARD HAUGHTON, M.D. (Liverpool.) "The Importance of the Functions of the Skin," by ABRAHAM TOULMIN, M.D. (St. Leonard's.)

WE believe most firmly that the Turkish Bath, used with reasonable discretion, will prove a most valuable means of preserving health, and of relieving certain diseases, as well as of creating a greater and fuller popular notion of the value of the skin and the dignity of cleanliness. We should greatly desire to see, likewise, a crusade for the introduction of lighter, more porous, and more easily cleansed clothing than the woollen materials in common use; for surely no article of dress, inner or outer, ought to be worn, day after day, for months, without cleansing of some kind; and on this score we pray fervently for the free supply of cotton, or of any other less costly material. The surest means to produce a permanent and beneficial result, will be extreme moderation in statement, and careful collection of facts and cases, however trifling, of the effects of the bath under well-defined conditions; and the surest way to disgust a fickle public will be to begin with high-flown, romantic (not to say fulsome and extravagant) praises—to predict certain results from various distorted *à priori* physiological arguments, without humbly waiting to make experiments and give the results—to make astounding statements to attract the popular ear—and, above all, to get up a kind of sectarianism, and to insinuate that in "some hands" the Bath may be mischievous or fatal. Dr. Haughton, for example, says, "Injuries do result from baths of this description" (the too hot and dry). "I do not wish to give the names of the places in which such misfortunes have happened, because, by doing so, I should probably injure some individual in a pecuniary sense; but I feel bound to say that a good many cases of illness produced by (so-called) Turkish Baths have come under my own observation." We believe that by this time the public is pretty well enlightened on the general objects and operation of the Bath; and the Profession knows pretty well what to expect. We hope, then, now to hear of results; of the cases relieved or cured, and of the good many cases of illness *caused*, according to Dr. Haughton, which he can surely publish *in terrorem* without divulging anything unpleasant or ruinous.

Reports of Cases treated at the Buxton Bath Charity and Devonshire Hospital. By JOHN ARMITAGE PEARSON, F.R.C.S. Pp. 36. 1861.

THIS pamphlet contains notes of a hundred cases, which are possibly useful, and an inkling of some of the small Medical jealousies of a watering place, which is amusing. Mr. Pearson dissents from the opinion that nitrogen is the useful element in the Buxton waters, and advocates their use by themselves without a farrago of drugs. He further makes the too true observation, "Spas have been exalted, and are still so, by interested parties, as panacean cures for all diseases, and battles fought between biassed spa-doctors, which only tend to raise doubts in the minds of thinking men."

Our Domestic Animals in Health and Disease. By JOHN GAMGEE, Principal of the New Veterinary College, Edinburgh. Part 1.

A WORK that will be useful to the agriculturist, as well as to the country Practitioner of (human) Medicine who desires an acquaintance with the structure and diseases of animals, but the arrangement and style are loose. Speaking of the distinction between the tongue of the horse and ox, Mr. Gamgee says, "It is by the circumvallate papillæ that we can at once determine if a tongue separated from the body, belongs to horse or ox." "It is supposed that horses' tongues find their way into victuallers' shops, whereas they should not be used as human food, though in the vast majority of instances, no injury would accrue therefrom. The tongue of the horse is long, with a well marked middle depression or line called the raphe, and a broad flattened free end. On either side of the middle line, towards the root of the tongue is a very large compound circumvallate eminence or papillæ. In the ox the tongue is pointed, deep, and with two diverging rows of papillæ on the base of the tongue. Each row numbers from eleven to thirteen papillæ."

The Prevention of Spinal Deformities, Especially of Lateral Curvatures, with Notes of the Causes, the Artificial Production, and the Injurious Modes of Treatment of these Complaints: with Numerous Illustrations. By MATHIAS ROTH, M.D. Pp. 80. London: 1861.

THIS is a popular book, containing some far from original remarks on the causes which lead to spinal curvature, especially in girls who are subjected to a cramming process in schools. The necessity of exercise, bathing and hygienic rules, and the ill effects of awkward attitudes, are fairly enough shown. But then comes the evidently selfish trait which stamps the class of book. Dr. Roth condemns the ordinary treatment pursued by Orthopædic Surgeons, consisting largely of mechanical support, as injurious, and speaks of the "ignorance of young Practitioners;" but he does not reveal his own treatment. All experience shows that, in a mechanical deformity, mechanical means should be added to hygienic.

Transactions of the Obstetrical Society of London, Vol. II. for the Year 1860. Pp. 368. London: 1861.

OUR pages have contained regular notices of the papers read before this Society, and therefore the collected *Transactions* require brief notice now. But we will not lose the opportunity of calling attention to the very able and emphatic memorial which the Council presented to the General Council of Medical Education and Registration, complaining of the short, hasty, and insufficient mode of obstetrical education which exists, of the imperfect examinations, and of the undignified and injurious effect of the midwifery licence of the College of Surgeons.

The Foot and its Covering: Comprising a Full Translation of Dr. Camper's Work on the Best Form of Shoe. By JAMES DOWIE. Pp. 204. London: 1861.

IF a boot be long enough for the toes, broad enough across the tread, well hollowed out under the inside of the arch, and cut so as tightly to clasp and support the ankle and instep, it will be pretty sure to fit. Mr. Dowie's book enters with some prolixity into the details of the subject, and will do good if it induce the public generally, and especially those whose duty it is to order boots or shoes for children, soldiers, and policemen, and those who make them wholesale, to attend to the natural shape of the foot, and to avoid such shoes as are rigid, tight, and ill-fitting. In the Affghan war many a weary English soldier, lamed by his boots, was picked off by the enemy's matchlocks.

Report on the Health of Liverpool during the Year 1860. By W. H. DUNCAN, M.D., Medical Officer of Health for the Borough. Liverpool: 1861.

THE mortality of Liverpool during 1860 was at the rate of 24·2 per 1000. During the ten years previous to passing the Sanitary Act it was 32·5. Hence 3800 lives were saved last year.

The Origin, Nature and History of Wine: its Use as a Beverage Lawful and Needful to Civilised Men. A Lecture. By CHARLES ELLIS. Pp. 56. London: 1861.

A VERY good vindication of the use of wine, taking the same ground as our article on "Nephalism," (see *Medical Times and Gazette*, February 9, 1861,) which is reprinted in the appendix.

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FOREIGN CORRESPONDENCE.

GERMANY.

Bonn, May 11.

THE CLIMATE OF, AND DISEASES INCIDENT TO, BONN.

From a cold and, for our climate, unusually rough Spring, during which we have scarcely had a single warm day, we have been suddenly hurried into the middle of Summer. North and north-easterly winds have prevailed until now. The day before yesterday the thermometer showed 36° F., to-day 84° F. This almost Russian transition from winter to summer is by no means usual with us; on the contrary, Bonn, as well as the whole neighbourhood of the lower Rhine and Holland, feels the proximity of the sea. The winter here is generally moderate, the summer warm, but not sultry or oppressive; and the climate is altogether different from that of Frankfort, Munich, Dresden, and Prague, which is more continental, viz., the winter is colder and the summer hotter. The English residing here do not, in fact, find any considerable difference between the climate of this neighbourhood and that of the south-western part of England. Here as there, delicate plants, such as magnolias, cypresses, glycines and others, grow in the open-air, and we have a cedar in our botanic garden, which emulates the famous one of the Jardin des Plantes in Paris. Quite near this city, at the southern foot of the seven mountains, is situated the little town of Honef, which is the most northern health-resort on this side the Alps. It is quite protected by the mountains from north and easterly winds; consumption is unknown there, and the Doctors of that place, with some presumption, call it the Rhenish Nice. Bonn itself is subject to special influences which determine the type of diseases prevalent here. It is situated at the outlet of the rocky valley of the Rhine. Just above it a large bay ends, which was left by the receding sea at the time of the flood, and which is limited by the foot of the Rhenish slate-mountains. Below Bonn the latter recede more and more from the Rhine, and at Cologne are only seen as blue clouds on the horizon. North winds cross the plain, and are carried into the valley of the Rhine; south winds coming from the other side. We have, therefore, at every season of the year strong winds, and in the more exposed parts of the town they are so cutting, that the beautiful alley of Poppelsdorf, which connects the quondam electoral country castle with the town castle, is called by the people "Consumption-alley." The fact is, that diseases of the chest and rheumatic complaints are extremely frequent here, and whoever has a disposition to tuberculosis ought not to come to us. Many a retired grocer who came to Bonn to end his days in happiness and *dolce far niente* in the beautiful valley of the Rhine, has paid for his rashness with his life. The most frequent diseases of acclimatisation are pneumonia and acute rheumatism, especially in spring and autumn. This spring has been especially fatal in this respect, and very numerous have been the victims to diseases of the chest. Whooping cough is very general among children, especially those of the lower classes. Diphtheritis is, on the whole, rare; but this year we have had a number of bad cases, some of which were saved by tracheotomy. During the last week Professor Busch has performed tracheotomy in three cases, two of which have done well. In adults repeated attacks of pneumonia often lead to tuberculosis. Quite recently we have lost by this disease two of our most esteemed colleagues, viz., Dr. Schäfer, a pupil of Wutzer, and formerly Surgeon to the Catholic Hospital, who died in the prime of life; and Dr. Boecker, the Kreisphysicus, late Physician to a new and very successful hydropathic establishment at Godesberg, and well known for his researches on the action of medicines, which, it is true, have given almost entirely negative results. I could mention a large number of such cases, and I have found that every fresh comer, before he is thoroughly acclimatised, has an attack of pneumonia or rheumatic fever. The situation of Cologne is far less dangerous to consumptive patients, but rheumatic diseases are becoming more frequent there; and in the plains further down, on the banks of the Sieg and the Roer, ague is also endemic, of which nothing is felt here. In consequence of rheumatism a considerable amount of heart-disease is also to be met with here. Miasmatic diseases are of rare occurrence, and we have never had a single case of cholera in this town, although it raged some time ago at Cologne. Typhoid fever, the common plague of large towns, is only sporadic here. Researches made some years ago by Professor Wutzer show that this disease sticks to certain places, where organic effluvia do not find a sufficient outlet. In the older parts of the town, where the cesspools have been built in narrow courts, and are often not cleansed for a number of years, there are several centres, from which new infections arise; these are especially some slaughter-houses in narrow courts, between high walls, which do not allow of a sufficient clearing away of offal, or where, at least, it is very carelessly done, inasmuch as the putrid blood and entrails of slaughtered animals often remain there for weeks. Thus we have here similar conditions for typhoid fever as, according to the valuable researches of Professor Pettenkofer, existed for cholera in Munich. But, fortunately, typhoid fever has never found a stronghold here, which is to be accounted for by the airy situation of the town. Cologne is worse off in this respect. In the hot months dysenteria prevails for a short time, and although it is often associated with cholerine, it scarcely ever takes a malignant form; during the last fifteen years, at least, I have never observed anything of the kind. Of the eruptive fevers, measles and scarlet-fever are the most common, and they from time to time rise to epidemics, which spread over the whole country; but these also generally take a mild form. When scarlet-fever is frequent, cynanche and diphtheria are also more commonly observed; at the same time furuncle, panaritium, and in the Hospitals erysipelas and phlegmone, are numerous. No doubt some connexion between these diseases exists; there is a general disposition to inflammations of the skin and the mucous membranes. In consequence of vaccination, which has been enforced by law for the last fifty years, small-pox has greatly decreased in intensity as well as in frequency. In 1849 and '55, however, we had an epidemic of variola. The few fatal cases which occurred were exclusively such where the patients had never been vaccinated. In almost all of those who had been vaccinated the disease, otherwise so terrible, took a very mild form. In the valley of the Wupper, where still much mystical fanaticism exists, the people refused to have vaccination performed, as they consider it sacrilegious to prevent disease sent by the Almighty; and some terrible epidemics of small-pox have consequently decimated the population there. The same is the case in some districts of Holland, where the people will rather die than be vaccinated.

THE SOCIETY OF THE LOWER RHINE.

At a recent meeting of the above Society Professor Albers, of this University, made some remarks on the difference of temperature on the surface of the body, especially the several parts of the head, in healthy persons, and in patients suffering from diseases of the mind and brain. The results of more than 400 observations on this point have been the following:—The temperature of the skin is subject to great variations. The change of heat in certain parts varies according to clothing, the time of the day, and the meals. It is therefore difficult to determine the absolute amount of the heat of certain parts; but it is more important to find out the relative heat of certain parts when compared with others. The temperature of the temples is usually 88° F., sometimes a little more, sometimes less, while the heat between the mastoid process and the lobe of the ear is 92·5° F. If the temples are at 86° F. the thermometer shows 90·5° F. behind the ear. If 88° at the temples, it is 92·5° F. behind the ear. In cases of disease the heat increases at the temples, but not so behind the ear, so that it is a symptom of a morbid process going on if there is less difference than usual in the temperature of these parts. On the neck between the two insertions of the sterno-cleido-mastoid muscle, the temperature is 95° to 97° F., and a little less in females than in males. The corresponding parts of the right side are warmer than those of the left, the difference amounting to from 1° to a little more than 3° F. In the paroxysms of melancholia agitans, and in idiots when they become restless, the temperature rises to from 2° to 7° F. The temperature is also increased during menstruation in insane females.

Dr. Marquard then made a communication on the new magnesium-light, as invented by Professor Bunsen, of Heidelberg, and said that the difficulty of procuring magnesium wire was considerable, but that he had succeeded, with the help of some

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suggestions made to him by Professor Bunsen, in making it. This he exhibited to the Society, and showed its effect in combustion. The magnesium light thus produced excited, by its wonderful brilliancy, universal astonishment, as all other lights became almost invisible by its side. But it was noticed that the consumption of wire was too rapid, and that it would be necessary to find out means to render the combustion of the wire less violent. It is scarcely probable that the high price which magnesium fetches now will prevent the use of this light, as no doubt a cheaper method of manufacturing magnesium, considerable quantities of which are contained in dolomites and magnesites, will be discovered at no distant time.

Professor Busch then gave an account of some experiments he had made for reducing dislocations without the traction hitherto generally employed. He was induced to make these trials by having to treat a case of dislocation of the head of the humerus, in which he had not succeeded, even while the patient was under the influence of chloroform, by a very powerful traction in reducing the head of the os humeri. As in this case the impediment was probably a tension of the capsular ligament, and the place where it was torn was known from the origin of the dislocation, after the patient had recovered from the effects of chloroform, reduction was tried by making the cleft of the capsular ligament open by a simple lever-movement of the arm. After this had been done, rotation of the arm was sufficient to bring the head of the os humeri back into the glenoid cavity. The facility with which reduction was thus accomplished, while the most powerful traction had been of no avail, was so striking that a series of experiments on dead bodies was made, in which dislocations of the humerus and of the femur were artificially produced. In such of these dislocations, in which considerable traction was necessary to remove the dislocated head of the bone only a little way from its wrong position, reduction was always very easily accomplished by rotation of the limb, provided the following rule was adhered to:—The limb must be brought into that position in relation to the trunk, in which it was at the time of the origin of the dislocation, and the upper edge of the cleft of the capsular ligament must be removed from the lower one (or the anterior from the posterior one) by the head itself, so that the cleft of the capsule becomes open. For instance, in dislocation of the femur backwards, the Surgeon ought to stand on the sound side, and take hold of the dislocated limb by the heel; he should then make extension in the knee-joint, and flexion in the hip-joint to a right angle or even beyond that; after this he should adduct the limb and then rotate it outwards. If, in artificial dislocation, the parts are laid bare at the posterior side, it is seen that the head of the bone is, by the flexion, removed from that position in which it was after the dislocation had been produced, and brought closer to the edge of acetabulum, while by the adduction it is raised over the posterior edge of the acetabulum, so that the Surgeon can put his finger between this and the head of the os femoris, so that rotation outwards is sufficient for establishing complete reduction. The success of this method was most striking in the different forms of dislocation of the femur; and it is probable that, in living man, it will have to be chiefly employed in such cases in which the position of the limb in relation to the trunk at the time of the origin of the dislocation, and the position of the cleft of the capsular ligament are known. Perhaps it will also be of use in old dislocations, as by making the cleft of the capsular ligament open, pathological productions, by which it has been narrowed, may be broken. Professor C. O. Weber has also been led to such conclusions by a series of experiments undertaken by him some time ago which he has published in his work, "Chirurgische Erfahrungen und Untersuchungen (Surgical Experiences and Researches)." Berlin: 1860.

MUNICH, May 19.

THE WATERS OF KRANKENHEIL.

IN my last letter I gave you the chemical composition and the mode of using the waters of Krankenheil. Their greatest peculiarity, when compared with other mineral springs containing iodine, consists in the small quantity of iodine, the large amount of carbonate of soda, and the comparatively small quantity of chloride of sodium which is found in them. Their principal action on the system is an improvement of nutrition, and a promotion of the retrogressive metamorphosis of matter and of the excretions. They have a very thorough, although mild, effect upon the body, such as is produced by very few mineral springs, as most waters which contain more iodine act too powerfully, and also contain too much chloride of sodium or sulphur. Krankenheil is therefore especially suited for delicate constitutions, as ladies, children, convalescent patients who have just emerged from tedious and weakening diseases; for patients who have tried many remedies, and whose general health requires to be improved, and in whom, besides, a local disease, an abnormal growth, a concrement or increase of the bulk of an organ ought to undergo retrogressive metamorphosis. In cases where certain organs are abnormally enlarged, thickened, or hardened, and at the same time the nutrition is impaired, it should also be prescribed. Its high and healthy situation, its pure air, and the picturesque neighbourhood of Tölz, have also a very beneficial influence.

Dr. Höfler, a very able Physician, who resides at Tölz, has found that the following diseases are chiefly improved by the use of Krankenheil:—(1) Scrofulosis in its various forms; (2) tuberculosis; (3) chronic eruptions of the skin; (4) chronic complaints of the urinary organs, gravel, etc.; (5) bronchocele; (6) enlargement and hardening of the genital glands, the prostate, the lymph and chylus glands; (7) galactorrhœa; (8) tumours of the liver and the spleen; (9) hypertrophy of the uterus and tumours of the ovaries; (10) stiffness of the joints; (11) exudations in the brain and the spinal cord, amaurosis, aphonia; (12) diseases of the mucous membranes, chronic catarrh, indigestion; (13) rickets; (14) syphilis; (15) varicose and other ulcers.

It may interest you to hear that Dr. Höfler has seen very decided beneficial results in patients who suffered from inveterate syphilis, who had already used very heroic and long cures, whose digestive organs were much deranged, and with whom iodine and its pharmaceutical preparations did not agree. Such patients improved remarkably after having drunk the Bernardsquelle for six or eight weeks; and then taking a solution of iodide of potassium according to Wallace.

PROFESSOR PETTENKOFER ON CHOLERA AND THE SOIL IN THE AUSTRIAN PROVINCE OF CARNIOLA.

No doubt your readers are acquainted with the theory of Professor Pettenkofer, of this University, on the epidemic propagation of cholera. According to him, the quality of the soil exerts an essential influence upon it; and one of his principal propositions is, that all porous and loose soil, which is able to imbibe a large amount of moisture, such as humus, sand, and gravel, and also fat clay soil, which is moist in itself, and keeps its surroundings also moist, favour the propagation of the disease. It seems that such is the case in consequence of the soil becoming impregnated with water and products of decomposition, especially of the evacuations of cholera patients, so that the poison is reproduced there. In neighbourhoods where the underground of the houses consists of compact rocks, sporadic cases may occur through contact with people who have come from other places where cholera exists, but it does not spread epidemically. Dr. Drasche, who is teacher of special pathology and therapeutics at the University at Vienna, has advanced a contrary opinion in his new work on epidemic cholera, which appeared in 1860, and in which the following passage occurs:—"Neither the chemical condition nor the physical state of aggregation of the underground of human dwellings forms a prevention against cholera as an epidemic; on the contrary, the disease may appear in localities where the houses are built on solid stones and on rocky basement, where there is no moisture at all, and the epidemics may be just as intense and extensive as in places where the houses stand on loose, porous, and more or less moist underground." He founds these assertions upon the course of cholera in the Austrian province of Carniola in 1855, during which, a large number of places, which according to him, were lying on compact rocks, were severely attacked by the disease. When this contradiction to Professor Pettenkofer's theory was published, the Bavarian Secretary of State for the Home Department, requested him to visit the province named and the Karst mountains, in order to examine the underground of a number of places, which, according to Dr. Drasche, were situated on solid rocks, and had, nevertheless, been visited by cholera; Professor Pettenkofer complied with

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this request last autumn. He first went to Vienna, where he made the personal acquaintance of Dr. Drasche, and on that occasion learned that this gentleman had never been in Carniola himself, and had made his statement on the authority of the contents of the archives of the Imperial Royal Geological Institute, and the notes made by the Imperial Bergrath M. Lipold. Professor Pettenkofer then visited three districts of the province of Carniola, one in the south-eastern, another in the middle, and a third in the south-western part of it; viz., Neustadt, Laibach, and Adelsberg, of which Dr. Drasche mentions that they are situated on bare solid rocks. The Professor there satisfied himself by an accurate personal examination of these places, that they are not at all on rocky ground, but partly on alluvial territory, clay and sand containing clay, partly on stones which are much rent asunder and fissured. The extensive and often gigantic ravines and cliffs which are found there, are filled up with very porous earth, which continually remains moist and gives the same facilities for the propagation of cholera as humus, sand, gravel, and fat clay. The condition of the soil in Carniola and in the Karst mountains, therefore, which should be a direct objection against Professor Pettenkofer's theory on the influence of the soil upon the propagation of the disease, has become another strong proof for it. Dr. Drasche is to blame inasmuch as he did not satisfy himself personally of the condition of the soil in Carniola, and for having believed that he had done enough by merely consulting geognostical statements. For geognostical purposes it my be sufficient to determine to what sort of formations the soil belongs, which angles of inclination are possessed by certain strata, what is contained in the single layers, and whether the surface is cultivated soil or not, whether it is generally dry, moist, marshy, sandy, stony, etc. In geognostic researches, it is also customary to apply observations made on a single spot to a large neighbouring territory. Such small objects as the underground of a house are of no value whatever to the geognost, while they are of the greatest importance to Medical Officers of Health and epidemiologists.

PHOTOGRAPHY IN ITS APPLICATION TO MEDICINE.

As every department of art is, since the days of King Ludwig, represented here in the worthiest manner, so our photographers need not fear comparison with those of Berlin and London. M. Albert, who is our Caldesi, deserves great credit for his zeal in making photography subservient to science. Last year he brought out an Atlas of Histology, the preparations for which had been furnished by Drs. Hessling and Kollmann, and which was published by Messrs. Engelmann, of Leipzig. The extreme truthfulness of the representation of the objects has excited the surprise and the admiration of all anatomists who have seen it. This year the same photographer has brought out an Atlas of the Anatomy of the Peripheral Nerves, by Dr. Ruedinger, the prosector to the anatomic theatre of this University. The text to it is written in German and French, and the whole work is, in the history of anatomical plates, a phenomenon unsurpassed up to the present time. Although lithographers and engravers may produce good plates, still they cannot even approach that truthfulness to nature which is the striking feature of photography. Their designs are either too stiff in consequence of a schematic manner adopted, or the artist, aspiring to an artificial finish, leaves the reins to his imagination and furnishes pictures which do not represent nature. Photography avoids both these faults, and must necessarily give absolutely truthful representations provided the photographs are well taken. Dr. Ruedinger who has made the preparations for the Atlas just mentioned, is entitled to much praise for having, by dint of care and perseverance, furnished objects for the photographer which are in the highest degree worthy of serving as pattern specimens.

The first part of this Atlas which has lately been published, contains the base of the brain, the medulla oblongata, and the upper part of the spinal chord with the origin of the nerves of the head; their exit at the external surface of the base of the skull; the third branch of the trigeminal nerve represented from without; the facial part of the portio dura; the whole trigeminal nerve prepared out of the bones and soft parts and fastened to a wax plate; and others. The second part will complete the nerves of the head; parts 3, 4, and 5 will contain the spinal chord, the nerves of the neck and the upper extremities, parts 6, 7, 8, 9 and 10 the nerves of the trunk, of the lower extremities and the sympathetic nerve. The costs of production are so great that the whole work will come to about six pounds sterling; still, considering the perfect finish of it, the price cannot be said to be too high, even when compared with that of engravings on copper and steel or lithographs.

LECTURES OF PROFESSORS BISCHOFF AND SCHOENBEIN.

One of the chief scientific attractions of this city are the lectures which are delivered in the laboratorium of our illustrious Professor of Chemistry, Baron Liebig, not only by Professors of this University, but also by strangers visiting Munich. Among the lectures recently given which have more particular reference to Medicine, I will only mention those of M. Bischoff, Professor of Physiology at this University, and M. Schönbein, of Basle, the celebrated discoverer of cotton-powder and ozone. M. Bischoff lectured on the Seat of Consciousness, and adverted to the proposition of M. Pflüger that the spinal chord participates in this faculty. He said that this idea could not be maintained, and that consciousness was only seated in the brain and not elsewhere. Criteria of consciousness in animals are, generally speaking, spontaneous movements, which appear to be made for a special purpose, and from which one may conclude that a conscious perception of an external stimulus has taken place; but the reflex movements which are observed in consequence of an external stimulus, without co-operation of the will, are even of greater importance in researches of this kind. The Professor then dwelt upon such cases which seem to contradict the principle that every change in the brain causes a change of consciousness, viz., such in which a lesion of the brain has taken place, and consciousness, nevertheless, remains intact; and on the other hand such where there is evident alienation of the mind, and the post-mortem examination does not show any structural changes of the brain. Concerning the existence of a special spinal soul, he said that the mere fact of its being possible to move the limbs of paralysed persons by the application of external stimuli, without their being conscious of it, was the strongest proof against such an assumption; and the experiments made on decapitated frogs were no proof for it whatever. The movements which were observed after a frog had been decapitated were only apparently spontaneous, but in reality they were reflex movements caused by tension of the nerves, concussion, or contact of the air with the spinal chord, which is necessarily laid open in such experiments. The apparently free choice of the animal of another extremity in order to keep off a stimulus applied to the other side where the extremity had been mutilated, was, if such really happened, easily to be explained by the general excitement of the system. Finally, the last and most ingenious argument, that the similar structure of the brain and the spinal chord, justified the theory of a similar function of both organs, was not at all conclusive, as it had not yet been satisfactorily shown that the ganglia really were the organs of consciousness. The existence of ganglia in the spinal chord, therefore, did not prove that the latter was possessed of consciousness. Ganglia were found all over the body, so that if the theory alluded to were accepted, we would be obliged to assume a consciousness dispersed over the whole system.

M. Schönbein, who has for the last twenty years studied the nature of oxygen with unvarying zeal, and who is a frequent visitor here, lately gave us a most interesting lecture on Oxygen and Nitrification. He said that oxygen is capable of assuming three different conditions—viz., two contrary active states and one passive. These three modifications of oxygen he has called ozone, antozone, and neutral oxygen, as contained in the atmosphere. There are several means by which the neutral oxygen is changed to ozone or antozone, and by which the two latter may again be reduced to neutral oxygen; or to effect, according to the nomenclature of Professor Schönbein, a "chemical polarisation and depolarisation of oxygen." Free antozone is contained in the dark blue fluoride of calcium which is found at Wölsendorf, in the Upper Palatinate; and the peculiar smell perceived on rubbing this mineral is due to the development of antozone. The Professor showed by experiments that nitrides can be changed to nitrates by ozone only, while the antozone and neutral oxygen have no action upon these salts. He also showed that the solutions of alkaline and other nitrates are at the common temperature reduced by certain metals, especially cadmium and zinc, and nitrides are formed, by

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which means the existence of almost infinitesimal quantities of these salts, when dissolved in water, may be proved. He remarked that the vapours observed if phosphorus is slowly burnt in a moist atmosphere, do not consist of phosphorous acid, as had hitherto been assumed, but of nitrate of ammonia, which is formed by an immediate combination of the nitrogen contained in the air with water; and he has always discovered small quantities of nitrate of ammonia in the water which fell in Basle either as rain or as snow.

GENERAL CORRESPONDENCE.

ELECTRICITY IN AMENORRHŒA.

LETTER FROM DR. ALTHAUS.

[To the Editor of the Medical Times and Gazette.]

SIR,—In his admirable Lecture on the Local Treatment of Amenorrhœa, which appeared in your last impression, Professor Simpson remarks that he would "rejoice to find any external mode of applying electricity effectual as an emmenagogue;" that "he has seen the galvanic current employed some fifteen or twenty years ago often, and certainly on the whole with little or no emmenagogue effect;" and that Dr. Ziegler also considers it "in the main quite useless and ineffectual." As my experience and that of other Physicians disagrees in this respect with that of Professor Simpson and Dr. Ziegler, I beg your insertion of the following lines:—

I have found electricity externally applied a very valuable emmenagogue in young and unmarried women, in whom we are led to assume a torpid state of the vasomotor nerves of the ovaries and the uterus, and also in such cases where the catamenia have been suppressed in consequence of emotion or cold. Faradisation has proved especially useful; I have also employed the continuous current, but with less benefit; while I cannot speak from personal experience on the value in these cases of frictional electricity, which I consider an antiquated remedy, and which should no longer be employed in practice.

I am well aware that in many cases of amenorrhœa the application of electricity has been followed by negative results; and I am quite ready to admit that electricity, even when properly applied, is not infallible in the class of cases I have alluded to. But I consider that very often the method of application has been such as to render a beneficial result all but impossible. Only recently, a case has come under my notice in which a Medical man believed himself to be engaged in applying the Faradic current to a woman suffering from amenorrhœa. On inspection of his manner of administering the current, however, it was discovered that he had united the conducting wires with the poles of the cell instead of with those of the coil! As the apparatus he had on the table was a powerful one, he was greatly astonished that his patient had not the slightest sensation of a current passing, and he concluded that it was a case of deep anæsthesia of the genitals! His astonishment increased when, the wires being put into their proper places, the anæsthesia suddenly disappeared, and the patient called out that she was now fully sensible of the passage of the current! Although cases of such gross ignorance may be rare, still there is no doubt that electricity is only seldom applied as it ought to be.

Another mistake is frequently committed which prevents beneficial results taking place. Doctors as well as patients are disappointed if no immediate benefit results from the employment of a "wonderful remedy," as electricity is unfortunately called. But perseverance is just as necessary with the electric treatment as it is with many internal remedies; and if perseveringly carried out, this plan of treating obstinate cases of amenorrhœa will be found to be attended with the best results, although signs of an improvement may be wanting for some time. In one patient whom I had recently under my care, the catamenia only appeared after the forty-sixth *séance*, when all hopes had been well-nigh given up by her; and it is only in a proportionately small number of cases that electricity yields rapid curative effects.

As to the parts of the body to which the current should be directed, I may add that Faradisation of the skin of the soles of the feet by means of wire brushes, or Faradisation of the abdominal parietes by means of moistened conductors, and finally the application of one moistened conductor to the nape of the neck and of another over the os pubis, are the most effectual methods in cases of this kind.

I am, &c.

J. ALTHAUS, M.D.

18, Bryanston-street, Hyde-park, June 17.

MEDICAL SCIENCE IN BRESLAU.

LETTER FROM DR. KLOPSCH.

[To the Editor of the Medical Times and Gazette.]

SIR,—The *Medical Times and Gazette*, Vol. I. 1861, No. 563, contains an article from a correspondent concerning the Medical men of Breslau, which article is truly a conglomerate of false statements. I believe it to be but due to the readers of your valuable paper, that the principal, at least, of the false statements should be contradicted by one acquainted with the state of things.

Your Breslau correspondent writes:—Firstly. "We cannot say that literature and science flourish in Breslau." As a proof of the contrary we need only recal to mind the fact, that Botanists of the first rank and of European fame, such as Link, Treviranus, Henschel, Wimmer, Cohn, Nees von Esenbeck, Goeppert; Mineralogists and Geologists, as Steffens, Glocker, and Roemer; Zoologists, as Gravenhorst, Von Siebold, and Grube; Chemists, as Duflos and Loewig; Natural Philosophers, as Kirchhoff; Anatomists, such as Otto; Physicians, as Remer, Wendt, Frerichs, and Lebert; Surgeons, such as Benedict and Middeldorpf, have laboured and are still labouring here. Secondly. Professor Henschel died not three but five years ago. Thirdly. Dr. Gunsburg did not further microscopic science at a time in which it was proscribed in our University; on the contrary, he came here after Professors Purkinje and Valentin had been during many years the greatest microscopical discoverers, and had familiarised their numerous scholars with the uses of the microscope; and just as false is the assertion, that Dr. Gunsburg was appointed, shortly before his death, to a Professorship here. Fourthly. The intention of a certain Dr. Tinkenstein to begin here a Medical Journal is quite unknown in Breslau; as is also the fact, that he was thwarted in this intention by dissension between Professors Lebert and Middeldorpf and Dr. Cohn. Fifthly. The Medical section of the Vaterländische Society consists of, not from six to eight, but of more than sixty members. Sixthly. The statement that the Breslauer Physician are held together neither by a social nor by a scientific bond, is also untrue. Such a bond exists in the Medical Society of Breslau, which comprises 125 actual members, who meet every fortnight for scientific and social purposes. It is utterly false that some of the oldest and most influential Medical men here opposed the founding of this Society.

I beg you, Sir, not to withhold this communication from your readers. I am, &c.

DR. KLOPSCH,

Breslau, June 10. Secretary of the Medical Society.

[Our Breslau correspondent will, no doubt, defend the assertions made by him before long. In the meantime we may remark:—First. That our correspondent did certainly not mean to say that science and literature have *never* flourished at Breslau; his second letter which we published in our impression for June 1, and in which the names of many eminent men of science are mentioned who have flourished there is the best proof that such is not his opinion. Many of the names mentioned by Dr. Klopsch, as Nees von Esenbeck, Treviranus, Henschel, etc., etc., are those of men deceased long ago; others, as Von Siebold, Frerichs, etc., have been but are no longer, at Breslau. Besides, Dr. Klopsch does not contradict the qualification of our correspondent that the publication of a Medical book is an event of very rare occurrence in Breslau. Second. That Professor Henschel's death was stated to have taken place 3 years ago instead of 5, is certainly not due to our correspondent being ill-informed, but to a mistake of either the copyists or the printers, which is easily accounted for. Third. We beg to

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suggest to Dr. Klopsch that Professors Purkinje and Valentin were Physiologists, and not Physicians; and that the use of the microscope in anatomy and physiology may be, and has often been, considered legitimate, by persons who denied its usefulness at the bedside. But as to these and other questions raised, our correspondent is, no doubt, able to justify the statements made by him.—Ed.]

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, June 11, 1861.

Dr. C. J. B. Williams, F.R.S., Vice-President, in the Chair.

A Paper, by Mr. Oliver Pemberton, M.R.C.S., was read,

ON A CASE OF ANEURISMAL VARIX IN THE UPPER PART OF THE THIGH, FOLLOWING THE EMPLOYMENT OF PRESSURE FOR THE CURE OF AN ANEURISM OF THE POSTERIOR TIBIAL ARTERY.

The patient, an old soldier, was fifty years of age, and had, about ten weeks before coming under Mr. Pemberton's notice, perceived the symptoms of an aneurismal swelling in the calf of the right leg. This was afterwards found to be an aneurism of the upper part of the posterior tibial artery. A month after his admission into the Hospital, the aneurism was treated by pressure—applied, first, to the femoral artery on the pubic arch, for three weeks; and, secondly, to the femoral artery just below Poupart's ligament, above the origin of the profunda—for a period of nine months. At the end of ten months from the date of his admission he was discharged, the aneurism of the posterior tibial artery being quite cured, and no inconvenience having been experienced from the pressure beyond œdema of the limb from time to time. There was, however, some thickening at the spot where the pressure had been for so long a time applied. The patient resumed his employment, and for ten months continued well, when suddenly all the symptoms of a communication between artery and vein, at the seat of pressure, manifested themselves; again he was admitted into the Birmingham General Hospital. On examination, there was no doubt of the existence of a permanent communication between the femoral artery and vein, corresponding in situation to the seat of pressure. The patient died, without leaving the Hospital again, eighteen months from the time when the secondary disease first appeared. During the progress of the arterio-venous disease sloughing sores formed in the leg, below the seat of communication. These, however, finally healed, and the immediate cause of his death appeared to be effusion into the pleural and peritoneal cavities, consequent on disease of the heart. The duration of the case was as follows in its various stages:—1. The aneurism of the posterior tibial lasted from its first appearance to its cure thirteen months. 2. He remained well for ten months. 3. The arterio-venous disease, from its commencement to termination, eighteen months. 4. The duration of the case, from its commencement to its termination, forty-one months. In the dissection, the arterio-venous disease was found to be that variety termed aneurismal varix. The right femoral artery and vein communicated by a large, distinct opening in the former vessel; whilst the vein was dilated and varicose, so as to have expanded itself into a sacculated covering for the greater portion of the artery in which the aperture had been established. There was no arterial aneurism, but the femoral artery was dilated at and above the aneurismal varix. The author of the paper attributed the formation of the arterio-venous communication to the effects arising from the long-continued pressure on the femoral artery and vein, the disease having arisen exactly in the spot where the pressure was made use of for nine months, with the view of curing the aneurism in the posterior tibial. The mode in which this was induced seemed to be, that the femoral vein became varicose from the pressure, causing obstruction to the return of its blood, and subsequently adhered intimately to the artery. Afterwards, the communication was established between the two vessels owing to the pressure of the varix on one hand, and to the action of the blood on diseased arterial coats on the other.

Dr. C. J. B. Williams believed that, as the next Paper by Dr. Wade was on a kindred subject, it would be better that the discussion should follow both Papers.

A Paper, by Dr. W. F. Wade, was therefore next read,

ON A CASE OF AORTIC ANEURISM IN WHICH A COMMUNICATION WITH THE PULMONARY ARTERY WAS RECOGNISED DURING LIFE BY MEANS OF PHYSICAL DIAGNOSIS.

James S., aged 35, married, a railway porter, was admitted into Queen's Hospital, Birmingham, on May 5, 1861. For four years he had suffered from piles, and for six months had lost much blood from them, and from this he attributed the debility and wasting for which he sought assistance. Two weeks before admission he had to make a sudden and violent exertion, after which he felt faint for a little while, but thought no more of it. He never had any palpitation or cardiac difficulty; was affected with a little dyspnœa and slight cough with watery expectoration. *Physical Examination.*—Cardiac dulness increased vertically. Apex seen and felt in the sixth intercostal space. Over the cartilage of the left fourth rib a loud murmur replaced both sounds, that with the second being of a hissing character, and so prolonged as to continue till the commencement of the next first sound. Usual second sound inaudible there. Marked thrill at this spot coincident with second murmur. First murmur, a loud bruit de soufflet. Both murmurs heard in the carotids and over the upper chest. At the apex, a single murmur with first sound; normal second sound very distinct. No venous distension. Thrill in the carotids, pulsation of which was visible. Mucous râles in back of both lungs. Liver enlarged. From this combination Dr. Wade concluded—1st, that blood escaped from either the aorta or pulmonary artery during their systole; 2nd, that it was probably from the aorta that the blood escaped; 3rd, that it did not regurgitate into either ventricle; 4th, that it regurgitated into one of the auricles or else into the pulmonary artery; 5th, that it did not regurgitate into the left auricle; 6th, that the opening was into the pulmonary artery, rather than into the right auricle; 7th, that the communication was probably due to aneurismal perforation of the aorta at or near its origin. The patient stayed in the Hospital for two or three weeks, and went back to work, declaring himself well. On the 14th of June he was seized with faintness and violent cardiac perturbation, which continued till the 28th, when he died. The post-mortem examination showed an aneurism of the size of a small hen's egg very near the root of the aorta, with a rounded, smooth, thickened opening into the pulmonary artery at its origin, and another, fissured, ragged, evidently recent one into right ventricle. The valves were all healthy. Dr. Wade did not see the patient alive after leaving the Hospital. During the fatal attack he came under the care of Mr. Pemberton. This case, coupled with one by Professor Hughes Bennett (with which, however, Dr. Wade was not acquainted till after the death of his patient), seemed to establish the physical diagnosis of such lesions, which, the author said, was the more important since they were more common than other forms of varicose aneurism. But since the key to this diagnosis was the non-conduction of the second murmur to the heart's apex, we should be at a loss, 1st, where aortic regurgitation existed; 2nd, where pulmonary regurgitatian existed; 3rd, if varix produced no murmur with the second sound; 4th, where there was also an opening into either ventricle, or into the left auricle or its appendix. This last lesion was very rare, Dr. Sibson recording no case of it. Purring tremor, or thrill, was useful as a diagnostic of varicose aneurisms when it occurred away from the heart; but when in the cardiac region it was useless, or at least unreliable, because any amount of thrill was producible by simple valvular lesions. Yet if such a thing were suddenly developed it would have significance, even if confined to the region of the heart. This was the first case in which this lesion had been physically diagnosed during life, Dr. Bennett not having deduced any diagnosis from his carefully observed and recorded case.

Mr. Hodgson remarked that the Society must feel much indebted to Mr. Pemberton for the opportunity which he had afforded them of knowing and discussing a case which he believed to be unique. It was the first instance, as far as he

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knew, in which any material injury to the vessels had arisen from the employment of compression for the cure of aneurism. He differed from the Author in his explanations of the mode in which the communication between the artery and the vein was effected. He (Mr. Hodgson) was aware that the long-continued pressure might have caused the varix of the femoral vein, but in his opinion it might also have caused an attenuation or thinning of the middle coat of the artery, which then became dilated, as in fusiform aneurism, and adherent to the vein or varix. Subsequently a communication, either by ulceration or rupture, between the varix and the dilated portion of the artery had been established, constituting the aneurismal condition which existed in this case. The result of this single case Mr. Hodgson considered did not militate against the value of compression in the treatment of aneurism, as this method had now been successfully adopted in a vast number of cases, and, excepting this instance, he knew of none in which the like result had followed its employment. He concluded by expressing his belief that the introduction of compression was the greatest improvement that had been made in the surgical treatment of aneurism since the time of Hunter.

Mr. Paget would not suggest an opinion as to whether the artery or the vein was the first to be affected. He would, however, allude to a way in which the coats of an artery might be destroyed at a single point without any general thinning or disease. The aperture in the artery in these cases was round; there was no considerable aneurismal dilatation, and certainly no thinning. He would not venture to say that in this case there had been a perforating ulcer of the artery, but he would say that such ulceration did occur in arteries, just as they did in other structures, as in the stomach or intestines. An ulcer would form in a single spot, the rest of the structure being apparently quite healthy, and then go right through. Mr. Paget then alluded to a case which occurred in his practice at St. Bartholomew's, in which there was a swelling at the lower part of the femoral. An aneurism was diagnosed, and the femoral was tied. After nine or ten weeks, secondary hæmorrhage came on, and the patient died. On a post-mortem examination it was found that there was no aneurismal sac, but at the point suspected there was an opening in the artery, through which blood had escaped, and thus a tumour had been formed, which simulated an aneurism. There was no other disease of the artery, and the edges of the opening were soft, not thick, but uneven. There was no history of rupture, nor of violence. Mr. Paget had also seen other cases like this one, in which also the artery was healthy, except at a single point where there was an ulcerated opening, and extravasation of blood. This was, he believed, a form of disease not described in books. It was local ulceration perforating the coats of the artery.

Mr. Hodgson wished to ask Mr. Paget if there was any disease of the artery, as in Mr. Pemberton's case, and if the opening was consequent on that. Mr. Hodgson had seen such ulcerations in arteries, but he had generally found other disease of the artery. They occurred, he believed, not from simple ulceration, but as secondary to atheromatous changes in the artery.

Mr. Paget replied, that in the cases he had related there was no disease of the artery.

Mr. Pemberton then replied. He considered that the case he had brought before the Society showed a result of compression which had not yet been noticed—viz., that a communication between the artery and vein had occurred after long-continued pressure. That fact stood by itself. Those who had heard the paper read could hardly fail to attribute this to the pressure which had been kept up over a period of nine months at the exact spot where the communication had occurred. The artery was somewhat dilated, but above rather than at the position of the opening. He believed that the primary disease was in the vein. The result of this case, he said, did not affect the value of the compression treatment of aneurism.

Dr. C. J. B. Williams would ask the opinion of the Surgeons present whether the disease of the heart was not adverse to a favourable result in cases of compression.

Mr. Pemberton remarked that in this case the contrary appeared to be the case, as, although the ultimate result was unfavourable, there was no doubt that the aneurism was cured by compression, and the man remained well for ten months.

Dr. C. J. B. Williams remarked, in reference to the second paper, that he had had an opportunity of seeing Dr. Thurnam's original case in the Westminster Hospital more than twenty years ago. The physical signs were well marked, sufficiently so to distinguish it from all cases of valvular disease. A long grating systolic murmur was heard, extending beyond the end of the systole, and continued even a little after the natural second sound. This implied something more than a systolic cardiac sound. Enduring beyond the second sound which marked the diastole, it could not be cardiac; it must be arterial, and proved that there was an opening from the artery into some other vessel—probably, as was most common, into the pulmonary artery. In this case the deviation of the sound upwards to the left of the sternum contributed to clear the diagnosis during life. This he had recorded at the time, and the observation had been subsequently published.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, June 5, 1861.

Dr. Tyler Smith, President, in the Chair.

A Paper, by Mr. Thomas Willian Nunn, F.R.C.S., was read,

ON INFLAMMATION OF THE BREAST; WITH AN ANALYSIS OF SEVENTY-TWO CASES.

The Author, after stating that while, as usually recognised by Surgical writers, the first months of lactation were pre-eminently distinguished by a proclivity to acute mammitis, asserted that there was another period of especial liability to the same disorder induced by hyperlactation. Of the total number of 72 cases which had fallen under the Author's observation in his public practice at the Middlesex Hospital and elsewhere, 58 occurred during lactation, 7 during pregnancy, and 7 in women neither pregnant nor lactating. Of the 58 lactating cases, 56 to 57 per cent. occurred during the first two months of lactation, during the subsequent seven months only 14 per cent, but after the ninth month 29 per cent. There was a special cachexia brought about by over-lactation, the proneness to inflammation being an indication thereof: a cachexia marked by a peculiar dryness and chalkiness of the skin; by drowsiness, constipation, dyspepsia, loss of appetite, and tendency to incontinence of urine; and by physical and mental lethargy—remarkably by the latter; the task of weaning appearing to the patient to be one of insurmountable difficulty; the breast themselves becoming preternaturally bulky and inelastic, and the peripheral portions of the lobes being most engorged. The Author argued that it was probable that the attacks of inflammation of the early period and of the hyper-lactating period had an analogous if not similar etiology, and that the treatment which experience had proved most successful was thus rationally confirmed. The results of Mr. Nunn's observations as to whether the right or left breast was the most frequently attacked coincided with those of M. Velpeau—namely, that either breast was equally liable. In 26 instances observation had been made by the Author as to which portion of the gland contained the focus of inflammation, and he found that the lower lobes were twice as often thus affected as the upper lobes. Regarding treatment, it was to be understood that the paper did not profess to deal with matters that the Society was so particularly well informed upon, but that on certain points permission was asked to say a few words:—1. That the continuous poulticing so often practised or permitted was decidedly mischievous, and hindered recovery, although it was not denied that occasionally, where there was deep sympathetic pain and hyperæsthesia of the surface, large warm poultices were soothing and grateful. 2. That the recumbent position, by preventing the undue infiltration of the lower lobes of the gland, was of the first importance. 3. That in the Author's hands belladonna had not given encouraging results, although he could not doubt, from the evidence of Mr. Marley and others, that in the earliest stages of congestion and as a preventive it had a beneficial influence. 4. That the moment for making the incision in the abscess, when formed, should be vigilantly watched for, as the rapidity of cure much depended upon this. That the extent of the incision should be such as to ensure efficient evacuation of the abscess, but nothing further. 5. The Author strongly advocated the employment of galvanism

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of low intensity, such as is afforded by the ordinary single cell apparatus for yielding the interrupted current, in the treatment of sinus, and painful œdema remaining after the more acute symptoms have subsided; acknowledging his indebetedness to a paper by Mr. Spencer Wells, published some years since, for the idea of so using galvanism. Whether galvanism stimulated the blood-vessels directly, or, by promoting the activity of the absorbents and the removal of the exudation products, permitted the capillary circulation, relieved of the *débris* by which it was clogged, to resume its normal condition, no hypothesis was hazarded. Of the great value of galvanism as a therapeutic agent the Author had seen abundant proof. Although the topic of the paper legitimately confined the Author's remarks to a limited field, he could not refrain from urging upon the Society the importance of the whole subject of over-lactation, as his almost daily experience at the Middlesex Hospital made him the witness of its deplarable effects on the children of the poorer classes.

Mr. Ballard said he thought the Author, in assigning a cause for mammary abscess, had laid too much stress upon the health of the mother, and had not made sufficiently prominent that which seemed to be really the exciting cause of the evil—namely, a demand made upon the breast for an amount of secretion it was at the time unable to yield. The statistics quoted were in accordance with general observation, and seemed to corroborate this view, the occurrence of the greater number of cases in the earlier periods of suckling being caused by the child sucking in search of a greater quantity of milk than the gland has as yet acquired the power of secreting. Again, in the latter periods there may be a failure of secretion in consequence of the re-establishment of menstruation or of pregnancy; the demand continuing as before; the breast is exposed to the irritation of excessive sucking. Breasts, of which the nipples are defective, are very liable to become inflamed; their secreting power is usually very imperfect, although the determination of blood to them is the same as if they could secrete freely. Vain attempts to procure milk under these circumstances are very apt to induce inflammation and abscess. In the treatment of an abscess of the upper segment of the breast, he had found the drainage tube very useful; it enabled the pus to flow freely when, otherwise, none could escape.

Dr. Braxton Hicks thought the prophylactic treatment the most important to Obstetricians. He had found belladonna (equal parts of the extract and glycerine) applied externally, at the same time giving internally iodide of potassium in eight-grain doses, a most effective method of checking the secretion of milk, where, from various circumstances, it was desirable to do so, and instanced a case where the child could not suck, in consequence of imperfect nipples, and of the engorgement of the breast, and where it seemed impossible to avert abscess, in which this treatment had answered admirably; he had never seen any ill effects from its use. He wished to hear the experience of the Society upon the point.

Dr. Druitt said that he supposed the present discussion was not intended to embrace the whole causes and treatment of breast abscess, otherwise the use of pressure, and particularly of plaster straps, as preventives and as remedies, would have been mentioned. He believed that in every or almost every case of weaning, plaster straps should be used to take off the weight of the breast, to compress it gently, and thus to aid Nature in restoring the natural size and beauty of the organ. In this case beauty was associated with health.

Dr. Tyler Smith observed that the chief causes of mammary abscess soon after parturition were obstructed milk-ducts, and the irritation of the gland by fissures of the nipple. The latter caused suppuration of the glands, just in the way that irritation of the urethra or vagina caused suppuration in the inguinal glands. The best way to prevent the abscess was to cure the crack in the nipple, and he knew of nothing better than painting it with a strong solution of the nitrate of silver. Abscess depending on obstruction of the gland could often be prevented by belladonna. He had found smearing the breast with equal parts of the extract and water, a better way of applying it than in the form of ointment. Bromide of potassium seemed to have a specific effect in diminishing the action of the mammary glands, both when given internally and used as a lotion. In the important class of cases first pointed out by Mr. Nunn as occurring at the end of lactation, and due apparently to fruitless sucking, the weaning of the child was always advisable. In chronic abscess, support and compression of the breast by strapping or belladonna plasters, leaving the openings of sinuses free for the discharge of matter, was of the greatest possible use.

Dr. Tanner said that there were two or three points in the valuable paper which had just been read on which he should like to make a few observations. And first, as to the women who most frequently suffered from inflammation of the mammæ. Dr. Tanner had noticed that it was much more common in strumous, weakly subjects than in others; and that such labours as were attended with flooding seemed to predispose to it. Consequently he quite agreed with the Author that, speaking generally, antiphlogistic remedies were contra-indicated. Then, as regards the use of belladonna in preventing the inflammation running on to suppuration, he (Dr. Tanner) had great faith in it. He thought that this drug often failed to be of use because it was not employed with sufficient freedom. The best plan was to paint the whole gland with it, and then apply a cold bread-and-water poultice, repeating the application twice or thrice in the day. As to the ill effects of over-lactation, no one who was engaged in Hospital practice could fail to notice them. He remarked, that he never sat in the out-patient room without seeing several cases where the women were doing themselves great mischief by undue lactation, and frequently he found remonstrance useless, as the patients knew they were acting unwisely. Dr. Tanner briefly related the particulars of a case which had interested him very much in illlustration of the truth of his remarks. The chief points were these:—A strong, healthy young woman, twenty-three years of age, married in 1856. Her first child was born in August, 1857, and she suckled it for more than two years, though after the first twelve months her health began to fail. The second child was born at the end of 1859, so that pregnancy commenced during the time of nursing. The child was suckled for six weeks only; but it was weak, and never appeared to thrive. The mother's health quickly became worse and she died of phthisis in September, 1860; while the second infant wasted and perished two months afterwards. Now, here was a strong woman, marrying a healthy man, and neither party having any hereditary taint of phthisis or other serious disease. The first child lived because the mother was strong for the first few months of nursing, and afterwards it was fed with cow's milk as well as by the mother. The second child's life was sacrificed because, when it most needed good milk, it had only the impoverished secretion afforded by the mother. Dr. Tanner said that he could refer to other cases quite as distressing.

Mr. Gervis remarked on the delay common amongst the poor in putting the child to the breast after delivery, as a not unfrequent cause of acute mammitis occurring at the commencement of lactation. He had found it a still too prevalent notion that the child should not be allowed to suck until the third day, and by that time the breasts were often very considerably swollen and tender, and the nipples retracted; much painful manipulation was had recourse to to draw out the nipple, and thus inflammatory action frequently provoked in the already highly-congested breast. Respecting the frequency with which lactation was unduly prolonged, as referred to by Dr. Tanner, Mr. Gervis had found in out-patient practice that the usual incentive to it was the desire to ward off a speedy recurrence of pregnancy, and that explaining to the patient the inutility of lactation as a protection after, at all events, the first few months, was generally effectual in obtaining her acquiescence in the propriety of not continuing suckling to the injury of her own and her child's health.

Dr. Madge said there was one important point in the subject of mammary abscess which had not been alluded to in the paper nor in the discussion, although it was one that must be an occasional source of anxiety to those engaged in practice—namely, the advisability, in cases of abscess of one breast, of weaning the child, so as to prevent the irritation of lactation on the healthy side from keeping up, by sympathetic influence, the tendency to suppurative inflammation in the other. Many high authorities recommended weaning the child under such circumstances, and he had no doubt that some cases, as regards both mother and child, would not get on well unless that course were adopted; but he had had several cases in which, by carefully applying strapping to the affected side, all irritation and inflammation had subsided, and the

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mother had been enabled to suckle the child with the unaffected breast to the full period of lactation. He had every confidence in the preventive and curative effects of strapping the breast, and thought it better in every respect than any other mode of treatment.

Dr. Gibb enquired if Mr. Nunn did not draw a wide distinction between the cause of milk abscess at an early period of lactation and that occurring after prolonged suckling. He thought that not unfrequently changes in the milk itself in the latter were the real cause of the abscess; the chief of these changes he believed to be a fermentation of the sugar of the milk at the moment of its secretion from constitutional causes, giving rise to the formation of vibriones and monads, producing sometimes great irritation, with a tendency to suppuration. He had elsewhere gone into this subject; but he thought it would be a matter of importance to examine the milk as taken from the breast, when the abscess occurred late in suckling. Of several hundred specimens of milk which he had examined, the milk had been found in the condition he described in a few instances, when there happened to be a co-existing abscess in advanced lactation.

Dr. Richards believed that as much as nine-tenths of the entire number of mammary abscesses, occurring within the first two or three months of childbirth, were produced by badly-formed, fissured, or ulcerated nipples. He always considered the sore nipple the *avant courrier* of bad breast. Lactation under these circumstances was so exquisitely painful, that very few mothers, especially primiparæ, had courage to persevere. Engorgement and inflammation of the breast resulted, aggravated by absorption from the ulcerated nipples. Any application to, or method of treatment of, such inflamed mammæ is non-effective, unless you can remove the cause, the soreness of the nipples. Failing in this, it is far better to wean the child at once rather than wait for suppuration. When suppuration does occur, the best treatment was hot fomentations and poultices; an early and free evacuation of the pus followed by well-regulated pressure on the breast and a generous diet. Local depletion and applications of belladonna, etc, are worse than useless, although such treatment might be of much service in mammary inflammation arising from cold or injury from accident, more especially at a later period of lactation. He had found the metallic nipple-shields of much service, and could refer to great numbers of cases, more especially in strumous, thin-skinned women, where sore nipples, when fissured and even half ulcerated away, had healed under their use, and he had never found any ill effects from them.

Mr. Owen had found great benefit, in the treatment of sore nipples, from the use of a lotion composed of borax, oil of almonds and water.

Mr. Nunn, in reply, said that he had not pretended to deal with the subject of inflammation of the breast generally. He desired specially to lay before the Society the fact, that out of 72 cases nearly 30 per cent. had occurred after lactation had been prolonged beyond the tenth month, and that he had met with as many cases in women who were either pregnant, or neither pregnant nor lactating, as he had in women who were lactating between the second and ninth month after delivery. He did not approve of the use of drainage tubes in sinuses as superficial as those of the breast. He believed galvanization would effect more. His experience was of cases in which the inflammation was fully established; he could therefore say nothing as to the prevention of inflammation in the breast by the application of belladonna. He had extensively used pressure, as recommended by Dr. Druitt, and so well described by him in his work on Surgery, and had found it most serviceable. Mr. Nunn remarked, that a very convenient means of support to the breast could be made of spongio-piline, shaped into hollow cones. He quite agreed with Dr. Tyler Smith that sore nipples were a frequent cause of inflammation, and as to the treatment. He could not coincide with the President, however, that ointments were bad vehicles for medicinal substances—that they prevented absorption. On the contrary, he believed they favoured absorption. He confessed he had made no careful examinations of the milk of hyperlactating females, but he was quite prepared to hear from Dr. Gibb that such abnormal conditions of that secretion as were met with by Dr. Gibb did obtain. In respect of the special influence of the mercurial ointment, he was scarcely prepared to say that it was possessed of sedative properties in a higher degree than some other metallic preparations; he, however, occasionally found very satisfactory results from its use. He was glad to hear Dr. Tanner advocate the exhibition of tonics and the administration of support. His own experience of these remedies led him to oppose depletory measures.

ROYAL SOCIETY.

Thursday, May 30, 1861.

Sir H. Holland, Bart., Vice President, in the Chair.

A Paper, by Dr. Edward Smith, was read, on the

ELIMINATION OF UREA AND URINARY WATER IN RELATION TO PERIOD OF THE DAY, SEASON, FOOD, LABOUR, ETC.

This Paper contained the results of the Author's researches from January, 1860, to March, 1861, and comprehended about 1300 analyses of urea. The researches were of three kinds,—1st. Those showing the daily and hourly changes in the system throughout the year, and including 336 days; 2nd. Others showing the influence of certain kinds of food; and 3rd. Experiments on tread-wheel labour and the discipline of prisons. The two former were made upon himself, and the last upon four prisoners, during one month. The method of analysis in all the experiments was that devised by Liebig. The average elimination of urea and urinary water was almost identical with the average obtained from all the experiments hitherto recorded at each of the seasons of the year, viz., 519 gr. of urea and 52 fl. oz. of urine, and the proportion of urea to body weight was 2·75 grs. per pound. The extremes were very great, viz., 298 and 748 grs. of urea, and 23 and 92 fl. oz. of urine. The daily variations in the amount of urine were most remarkable; so that alternations of large and small quantities proceeded through many days, or the quantity proceeded in waves, or with a progressive increase or decrease for many days, as in the following instances:—Alternations, 57, 37, 62, 44, 60, and 46 fl. oz.; waves, 73, 50, 41, 41, 57, 52, 54, and 63 fl. oz.; increase, 34, 38, 60, 62, and 74 fl. oz.; decrease, 68, 49, 49, 40, 42, 37, and 26 fl. oz. These were due to the influence of temperature and barometric pressure, but chiefly to the controlling action of the statics of the body, whereby there is a constant tendency to maintain an uniform bulk of the body, and therefore to counteract the influence of any disturbing agent. Thus sudden increase must be followed by great decrease, as 92 oz. were followed on the next day by 26 oz., and *vice versâ*. External agencies are daily tending to disturb the uniform action of the body, and the statics of the body as constantly tend to restore uniformity; and hence in a long average uniformity is established. The amount of both urea and urinary water was increased in the hot season, when a long average was taken or when the year is divided into two parts, viz., from May to October, and November to April. The quantities of urea and urinary water at these two periods were,—

Summer half-year, temp. 55°, urea 570 grs., urine 55·7 oz.
Winter half-year, ,, 44° ,, 480 ,, 51·9 oz.

Sudden warmth lessened the emission of urine, and thereby of urea, and sudden cold the contrary; but the balance was restored in a few days. The increase of urea connected with heat occurred on the following day; increased atmospheric pressure increased the elimination of urea on the same day. Hence both agents act directly and not inversely, and when acting together reinforce each other; but when opposed, they counteract each other and destroy the uniformity of the results. The proportion of urea to each degree of temperature was precisely the same at the two seasons of the year; in the summer half-year, 10·3 grs., in the winter half-year, 10·9 grs. to each degree. The period of production is not that of elimination of urea, and hence the results are often confused. The elimination is influenced by causes acting quickly and suddenly; whilst production can only be determined by taking long averages. With increase of urine there will be increase of urea. The ingestion of water has the same relation to the egestion of urea, that the inspiration of air has to the expiration of carbonic acid; and ingestion of water acts by causing an increased elimination of urinary water. In reference to period of the day, the Author found by experiments made during every hour and every quarter of an hour, as well as the ordinary ones made every day, that the largest

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hourly excretion occurs in the morning to about 12 and 1 o'clock. There is then a subsidence after the early dinner until after the tea-meal, when there is another considerable increase, continuing from about 6 to 9 p.m., and afterwards the quantity falls to the night rate of emission. The lowest rate of emission, both of urea and urinary water, occurs in the night and to the breakfast hour, and the next is found in the middle hours of the day, between the morning and evening maxima. The largest hourly emission of urea and urinary water observed at the short intervals of quarter of an hour, was 64 grs. and 21 oz.; but when observed at periods of one hour, the quantities usually were about 35 grs. and 11 oz. During the night the average rate was 16 grs. and 1 oz. per hour. In all these experiments food was taken at 9 a.m., 2, 6, and 9 p.m., and the average quantity of fluid taken was 56 oz., and of solids, 37 oz. daily. The largest daily emission of urea occurred on the Sunday with rest and increased food, and there was a diminution daily as the week advanced, ending with the Friday, which is the day of the author's attendance at the Hospital, and when there is a little less food taken, and more exertion made. The heaviest weight of body occurred on the Sunday, and from Sunday morning to Monday morning there was an average increase of nearly 2 pounds. The weight lessened daily during the week, with considerable and regular bodily exertion, but varied as the exertion and as circumstances increased or decreased the emission of urine. Extra and unusual food, as at public dinners, caused an increased emission of urea, which continued from one to four days, and varied from 50 to 200 grains per day. With stomach derangements and headache there was usually a diminution, the excretion of urea on the day of their occurrence, followed by an increase when relief was obtained. Treadwheel labour, in which between 400 and 500 tons were lifted one foot daily, or an amount of exertion made equal to walking thirty miles per day,—the increase in the elimination of urea was 19 grs. daily on treadwheel days over that of days of light labour, and 36 grs. over that found on Sundays; but the proportion of urea to body weight was so high as more than 4½ grs. per pound. These prisoners were well fed, but were thin and much below the average weight. There was the least elimination of urea on Sundays, with rest and the same food; but the loss of urea in the urine was exactly supplied by an increase in the nitrogen of the fæces on the Sunday. Hence there was less assimilation on the Sunday. The fæces were so large in the prisoners as an average of nearly 9 oz. per day, and contained between 30 and 50 grains of nitrogen. The loss of food was, therefore, very great, and in point of nitrogen, was as great as the quantity contained in one pint of milk. The influence of tea and coffee, and particularly of alcohol, was to lessen the excretion of urea and urinary water for a short period, but on the third day the quantity of urea was increased. The average loss in the excretion of water under the influence of alcohol, was 20 oz. per day for each man during three days. A final analysis of the food and the fæces was kindly made by Mr. Manning in all the experiments upon the prisoners.

The Author contrasted the conditions of the emission of urea and carbonic acid, and discussed the relations of urea to nutrition, which we cannot now quote. As urea is evidently a mixed product of tissue-waste and food, it cannot be accepted as a measure of either alone. It is very probable that the determination of the amount of urea evolved, is of less value in health than has hitherto been supposed, and that the most valuable field for inquiry now is the determination of the proportion of nitrogen in the food which obtains admission to the blood, to that which remains unappropriated in the alimentary canal. The only measure of muscular exertion is the evolution of carbonic acid by the lungs.

The Author gave a *viva voce* account of his researches, and referred to a large number of diagrams and tables which were suspended in the meeting-room.

Professors Carpenter, Williamson, Tyndall, Frankland, and others, took part in the discussion.

UNIVERSITY COLLEGE, LONDON.—At a special session of Council held on Saturday last, the 15th inst. (for the 16th of June, the anniversary appointed by the founder, for the election to the Atkinson Morley Surgical Scholarship), the Scholarship, £45 per annum, tenable for three years, was awarded to Mr. Henry Charlton Bastian, of Falmouth.

MEDICAL NEWS.

UNIVERSITY OF DURHAM.—At a Convocation held on June 18, the following Degrees in Medicine were conferred and Licence granted :—

M.D.	Licentiate in Medicine.
Thomas Thompson Pyle, M.B.	
William Young, M.B.	Robert F. Cooke.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise on June 13th, 1861 :—

Armstrong, Samuel, Woodbridge, Suffolk
Cooper, Herbert, Bristol Royal Infirmary
Davy, Humphry, Penzance
Harling, Henry, Fletching, Sussex
Hatchett, Joseph, Ravenstone, Leicestershire
Holman, Henry, Crediton, Devonshire
Lidderdale, John, Osmington, Weymouth, Dorset
Woodforde, Alfred.

The following gentlemen also on the same day passed their First Examination :—

Ashforth, George Morris, Guy's Hospital
Bennett, James, Middlesex Hospital
Brown, John Woodruffe, Amwell-street, Pentonville
Hawkins, Robert Richards, Winterborne, St. Martin
Holman, Thomas, Uckfield, Sussex
Pratt, Frederick Henry L., Guy's Hospital.

APPOINTMENTS.

BOYCOTT.—Dr. Thomas Boycott was recently elected one of the Physicians to the Kent and Canterbury Hospital, Canterbury.

GANDRY.—Mr. J. S. Gandry has been elected Surgeon to the Dispensary, Honiton.

JACKSON—SMITH.—Dr. Hughlings Jackson and Dr. Abbotts Smith were elected Assistant-Physicians to the Metropolitan Free Hospital on Thursday last.

RAMSBOTHAM.—Mr. Francis John Ramsbotham has succeeded in obtaining the Tancred Studentship in Physic at the University of Oxford, after a competitive examination.

DEATHS.

ANTHONY.—June 8, Edward Anthony, of Byfield, Northamptonshire, aged 63.

ASHNESS.—June 9, at Battersea Rise, Henry Ashness, M.D., aged 75.

AUSTEN.—June 17, John Colmer Austen, of Ramsgate, M.D. University and King's College, Aberdeen, F.R.C.S. Eng. (exam.), M.R.C.S., L.S.A., formerly Assistant-Surgeon, Royal Navy.

DE QUINCEY.—April 12, at Brazil, Francis John De Quincey, M.D.

FINCH.—June 13, at Heidelberg, Charles Denyer Finch, late of Lower Tulse Hill, Surrey, M.D. Univ. St. Andrews, Fell. and M.R.C.S. Eng., L.S.A., aged 42.

GRAY.—June 13, Henry Gray, of No. 8, Wilton-street, Grosvenor-place, Fell. and M.R.C.S. Eng., F.R.S. Lecturer on Anatomy at St. George's Hospital, and Surgeon to St. George's and St. James's Dispensary, aged 34.

GRIOLLE.—Recently, Dr. Griolle, a much respected Physician of Nimes, France. He was shot dead by an insane patient upon whom he was attending professionally.

PHILLIPS.—June 11, Benjamin Phillips, of No. 77, Gloucester-place, Portman-square, F.R.C.S. Eng., M.R.C.S., F.R.C.S., aged 56.

QUIGLEY.—June 14, Thomas Haswell Quigley, at Mountpleasant-square, Dublin, F. and M.R.C.S. Eng., late one of the Senior Surgeons of the Royal Artillery.

ROSS.—June 15, at Montrose, after a few days' illness, John A. Ross, Esq., for many years an able and respected practitioner of the town, and whose death is very generally lamented.

WILLIAMS.—June 10, after four months' illness, Maurice Owen Williams, of Tymawr, Llanrhaiadr.

THE GENERAL COUNCIL OF MEDICAL EDUCATION AND REGISTRATION will meet on the 27th inst., at the Royal College of Physicians.

MEDICAL REGISTRATION ASSOCIATION.—The memorial for the amendment of the 40th clause of the Medical Act is about to be presented, and the Committee of the Association have also under consideration an amendment in the Death Certificate Act.

THE GREAT EXHIBITION OF 1862.—Her Majesty's Commissioners for the International Exhibition of 1862 have requested the following gentlemen to act as members of a Committee on Surgical Instruments and Appliances, for the approaching Exhibition:—Mr. William Lawrence, F.R.C.S.; Mr. Joseph Henry Green, F.R.C.S.; Mr. J. Moncrieff

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Arnott, F.R.C.S.; Mr. John Flint South, F.R.C.S.; Mr. Cæsar Henry Hawkins, F.R.C.S.; Mr. James Luke, F.R.C.S.; Mr. F. Seymour Haden, F.R.C.S.; and Mr. James Paget, F.R.C.S.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At a meeting of the Council, held on Friday the 14th inst., John Hatch Power, Esq., M.D., was unanimously elected Professor of Surgery, in the room of the late Dr. Porter.

GALVANIC PRACTICE NOT MEDICAL PRACTICE.—The case of Thiselton *v.* Frewer, to which we alluded in our number for May 4, p. 474, has at last been decided by the Court of Exchequer. The plaintiff had performed galvanic operations, and had obtained a verdict. A rule was obtained to set it aside, on the ground that the cause of action was within the meaning of the Medical Act, 21 and 22 Vic., cap. xc.; and that the plaintiff was not a registered Practitioner. The Court decided that the galvanic practice was not illegal, and discharged the rule.

NATIONAL DENTAL HOSPITAL.—A meeting of dentists was held on Tuesday week at the College of Dentists for the purpose of establishing a "National Dental Hospital." The chair was occupied by Dr. Richardson, in the absence of Mr. Brady, who was prevented from attending by his Parliamentary duties. The Chairman said that this Institution was for the poor—for such as could not afford to pay the dentist's fee to attend them when suffering from dental diseases. There was no desire on the part of this Institution to interfere with the one already in existence; but, in a city so large, he believed that there was ample room for both these Institutions. This Hospital was not merely metropolitan, but national—one for the benefit of the whole of the United Kingdom, and one which expected to receive subscriptions and patients from all parts of the world. It would be conducted on the most liberal basis, as far as possible, and without any petty jealousies. He concluded by moving "That an Institution, to be called 'The National Dental Hospital,' be now established; the Hospital to provide gratuitous and efficient aid to the poor in diseases of the teeth, and to include means of instruction to students preparing for dental practice as members of the College of Dentists." Mr. Hayman seconded the resolution, which was carried. Dr. Pavy, of Guy's Hospital, and Dr. Richardson, were appointed Consulting Physicians; Mr. Erichsen and Mr. Spencer Wells, Consulting Surgeons; and Messrs. Wait, Merryweather, and Robinson, Consulting Dentists.

ROYAL COLLEGE OF SURGEONS.—The following are the names of the eligible Fellows who are Candidates for seats in the Council of this College at the ensuing Election on Thursday, the 4th of July next:—*John Bishop*, Bernard-street; *Gilbert Wakefield Mackmurdo*, New Broad-street; *Samuel Solly*, St. Helen's-place. Retiring from the Council in rotation. *Thomas Paget*, Leicester; nominated by Thomas Macaulay, Leicester; Thomas Warburton Benfield, Leicester; Charles Hayes Marriott, Leicester; Henry Terry, Northampton; James Mash, Northampton; William Wright, Nottingham. *John Adams*, St. Helen's-place; nominated by William Sankey, Dover; Frederick George Reed, Hertford-street; Charles Maynard Frost, Ladbrook-square; George Critchett, Finsbury-square; Nathaniel Ward, Broad-street-buildings; Peter Yeames Gowland, Finsbury-square. *William Fergusson*, George-street, Hanover-square; nominated by John Erichsen, Cavendish-place; James Ranald Martin, Mount-street; George Beaman, Lancaster-place; Henry Haynes Walton, Brook-street; William Adams, Henrietta-street; Henry Smith, Caroline-street.

DEATH FROM HYDATIDS IN THE BRAIN.—An inquest was held at the Walsall Workhouse, on an inmate of the workhouse, twenty years of age, who was found dead in bed on Sunday morning last. On her admission she complained of a pain in her head, and was treated for it by the Medical officer. On Saturday night she went to bed as usual, but just before eleven o'clock she complained of her head, and said she felt as if she should go mad. In a few minutes, however, she appeared to get composed, and to fall asleep. On the following morning, about six o'clock, she was found to be dead in bed, but was quite warm. Dr. Burton stated that on opening the head of deceased, he found the veins distended with dark-coloured blood. There were no signs of recent inflammation, but in the ventricles a quantity of sanguineous matter was found, and the brain was softened in places. In the *tuber annulare*, where the brain and the spinal marrow join, were four hydatid sacs or *cysticerci cellulosæ*. These conditions, he considered, were sufficient to account for the suddenness of the death of deceased. He had ascertained from her brother that she had had convulsions a week or two before coming into the workhouse, and he had further ascertained that it was not uncommon for her to eat sausages. The hydatid sac, he had no doubt, was composed of the egg of the tape-worm, the worm having been doubtless taken into the body in process of eating sausages not properly cooked, composed of measled pork. The eggs of the worm thus taken into the body found their way into the various organs, the liver, the head, eyes and brain, and the young worm again forced its way wheresoever it could gain most nourishment. In the present instance, the hydated sac, pressing upon the brain at the particular point named, caused death. The Jury returned a verdict of "Died of disease of the brain."

VITAL STATISTICS OF LONDON.

Week ending Saturday, June 15, 1861.

BIRTHS.

Births of Boys, 1017; Girls, 926; Total, 1943.
Average of 10 corresponding weeks, 1851–60, 1543·8.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	590	531	1121
Average of the ten years 1851–60	524·2	475·1	999·3
Average corrected to increased population..	..	..	1099
Deaths of people above 90	..	..	..
Deaths in 15 General Hospitals	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	463,269	1	7	3	..	15	4	1
North ..	618,181	4	6	3	1	12	8	6
Central ..	377,794	1	4	5	..	13	3	4
East	570,898	2	2	3	..	26	3	5
South ..	772,892	1	3	9	1	22	12	1
Total.. ..	2,803,034	9	22	23	2	72	32	17

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·859 in.
Mean temperature	60·5
Highest point of thermometer	80·3
Lowest point of thermometer	42·9
Mean dew-point temperature	54·3
General direction of wind	N.E. & S.W.
Whole amount of rain in the week	0·48 in.

BOOKS RECEIVED.

Another Letter to a Young Physician. By J. Jackson, M.D. Boston: 1861.

Lectures on Diseases of the Kidney. By S. J. Goodfellow, M.D. London: 1861.

Medico-Legal Relations of Intemperance. By R. Christison, M.D. Edinburgh: 1861.

A Book about Doctors. Second Edition. London: 1861.

Epileptic and other Convulsive Affections. By C. B. Radcliffe, M.D. Third Edition. London: 1861.

On Food and its Digestion. By W. Brinton, M.D. London: 1861.

Household Medicine. By John Gardner, M.D. London: 1861.

Operationslehre und Statistik der Resectionen. Von Dr. O. Heyfelder. Vienna: 1861.

A Visit to the Purton Spa. By R. H. Bakewell, M.D. London: 1861.

Transactions of the College of Dentists of England. London: 1861.

The Errors of Homœopathy. By Dr. Barr Meadows. London: 1861.

Heads of Lectures on the Practice of Medicine. By A. Anderson, M.D. London: 1861.

Primary Divisions of the Animal Kingdom. By R. E. Grant, M.D. London: 1861.

Southern Climatic Sanatoria. By Dr. Rullmann. London: 1861.

Scientific Plan and Principles of Medical Psychology. By T. Laycock, M.D. Edinburgh: 1861.

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Medical Times and Gazette.

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NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dr. Cameron's letter is unavoidably delayed.

Enquirer's letter is inadmissible. It would probably lead to legal proceedings.

Miles.—Sir C. Wood has stated in the House of Commons that the arrangements as to the future position of East India Medical Officers are under the consideration of the Government.

Mr. Teale's paper on Amputation will appear in the first and second numbers of the new Volume, not on the 29th inst. as announced.

Mr. J.—We never insert notices of Births and Marriages, and the only Deaths we insert are those of Members of the Profession and some men of science.

Obstetricus.—Naegele's mode of calculating when labour may be expected is by adding twelve months to the date when menstruation should have appeared and then deducting three months and eight days. For instance, a patient ought to have menstruated on July 1, 1861, but did not. You deduct three months and eight days from July 1, 1862, and your patient will probably be confined on or about March 23, 1862. The exact day has been frequently foretold in this way.

P. B.—Pope's lines run thus—

> "God and the Doctor we alike adore,
> But only when in danger, not before;—
> The danger o'er, both are alike requited,
> God is forgotten, and the Doctor slighted."

A Subscriber.—Section xvii. of the Medical Act provides that "any person who was *actually practising Medicine* in England before the 1st of August, 1815," is entitled to register. Such persons are designated "Medical Practitioners." It is not sufficient to show that the person was practising as a Druggist, or gratuitously, in 1815. He must give reasonable evidence that he was "practising Medicine."

ERRATUM.—Page 635, line 29, *for* "Joshua" *read* "John."

LUNACY SUPERSTITIONS.

The paper of Dr. Arthur Mitchell, Deputy-Lunacy Commissioner, appears in the "Transactions of the Scottish Society of Antiquaries," before which body it was originally read. W. D. F.

ROYAL COLLEGE OF PHYSICIANS PASS LIST.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I beg leave to direct your attention to an error in the report of the admission of Licentiates in the number which has just appeared of the *Medical Times and Gazette.* "The last-named gentleman" was not Mr. S. W. D. Williams, but Mr. J. V. Bell. I am, &c.

June 15. W. COPNEY.

THE SCOTCH DOUBLE QUALIFICATION AND UNION APPOINTMENTS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Can any of your numerous correspondents inform me as to the eligibility for Union appointments of candidates who have the double qualification of the joint Colleges of Edinburgh? A few months ago the matter was fully discussed, but the result, as far as I have been able to learn, has not been made known. There is another question which affects in no small degree the interest of those about to qualify—Is the Licence of the Apothecaries' Hall really essential, notwithstanding any other Medical qualification the candidate may possess? for it would appear that without it any legally-qualified gentleman may be prosecuted. Hoping that these queries may have the effect of drawing the attention of the Profession to this most important subject. I am, &c.

June 17. AN EDINBURGH MAN.

SUGAR WITH CHLORATE OF POTASH IN PHTHISIS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—That out of "about twenty cases" of (with two exceptions) the earlier stages of phthisis but one should have ended fatally during the course of twelve months of my practice, appears to your correspondent signing himself "A. Guy, M.D.," to be a fact deserving all the extravagant hyperbole in which he has indulged; to me it seemed a result little if at all more favourable than that which could be adduced as an occasional run of good luck by the majority of those who have had any experience in treating the disease, certainly not sufficiently marvellous to deserve Dr. A. Guy's "congratulations on my altogether unparalleled success, not only for finding out a remedy, but keeping my patients so long from the grasp of the grave." At all events, if I had found the remedy, where would have been the merit of prolonging life for one year?

Descending from his favourite vein of comic satire, the only serious remarks which Dr. A. Guy condescends to make on the subject, are of an equally lucid and logical character: *e. g.* his "caution about the use of chlorate of potash" where he says that having "read in one of the late American Journals of a stout, healthy man, who was poisoned by taking 3iv. daily for a short time, there can be no doubt whatever of the danger of administering wholesale doses."

When I have explained, as I still propose doing on a future occasion, my views as to the mode in which this apparently antagonistic combination acts on the system, I shall consider those views fair subjects for discussion and criticism; till then I must decline any dispute on the subject even with so good a logician as my late critic. I am, &c.

Boundary-road, N.W., June 15. JAMES TURLE.

VARIOLA WITH VACCINIA.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Having read Mr. Woodman's case of "Variola with Vaccinia in an Infant," I thought the following might be of some interest:—

In 1859, and whilst Assistant with Mr. Morley, of Leeds, I was called to see a boy of seven years old. The case proved to be one of confluent small-pox: the boy had never been vaccinated. There were two younger children in the same family of the respective ages of five and three years. Immediately on perceiving the nature of the disease in the eldest—and learning that it had not been done before—I vaccinated the two younger; one case was unsuccessful, the other case was successful, two fine vesicles resulting; and from these vesicles, at the 8th day, I again vaccinated the unsuccessful case. This time it did not fail. In a few days symptoms of small-pox were manifest in both of these vaccinated children,—in the former case two or three days after the vaccination was at its height, and in the latter the two diseases running a nearly, if not perfectly, simultaneous course. But neither of these—as in the case of the eldest boy—were confluent; on the other hand, the small-pox was much modified, although the marks of that, and of the vaccination, were distinctly visible in both children the last time I saw them. All three did well, and during their illness were seen by Mr. Morley. I am, &c.

SAMUEL FOULDS, M.R.C.S., L.R.C.P. Lond.

Staveley, near Chesterfield, June 10.

COMMUNICATIONS have been received from:—

Professor LAYCOCK, Edinburgh; Dr. WHITEHEAD, Manchester; Dr. THOROWGOOD; Dr. RULLMANN, Wiesbaden; Dr. KLOPSCH, Breslau; Dr. HEYFELDER, St. Petersburg; Mr. NEEDHAM, York; Mr. COOKE; Mr. FORBES; Mr. LE GROS CLARK; Mr. GARNER; and our Correspondents at Malta, Berne, Munich, Breslau, Bonn, Prague and Jena.

APPOINTMENTS FOR THE WEEK.

June 22. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

24. Monday.

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

25. Tuesday.

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 4 p.m. Professor Hilton "On the Influence of Rest in the Treatment of Surgical Diseases and Accidents."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY. 8½ p m. Dr. Down, "Case of Imperfection of Corpus Callosum and Fornix, and Absence of Septum Lucidum and Commissure Mollis." Mr. H. Lee "On Syphilitic Inoculation." Mr. Sibley "On Fibrinous Obstruction of Arteries."

26. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

27. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 4 p.m. Professor Hilton "On the Influence of Rest in the Treatment of Surgical Diseases and Accidents."

JUNIOR MEDICAL SOCIETY OF LONDON, 8 p.m., at King's College Hospital, G. Liveing, M.B., "On Alcohol, its Physiological and Therapeutical Action."

28. Friday.

Operations, Westminster Ophthalmic, 1½ p.m.

SAMARITAN FREE HOSPITAL LECTURES, 4 p.m. Dr. Routh "On Therapeutics of Some Diseases of Children."

EXPECTED OPERATIONS.

Metropolitan Free Hospital.—The following Operation will be performed on Monday next, at 2 o' clock:—

By Mr. G. Borlase Childs—Resection of Ankle-joint

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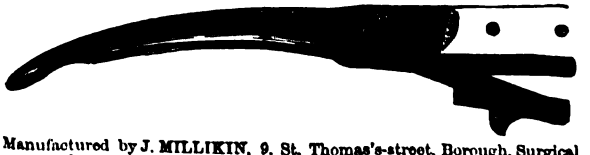

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ORIGINAL LECTURES.

CLINICAL LECTURES

DELIVERED AT

ST. THOMAS'S HOSPITAL IN 1861.

By F. LE GROS CLARK, F.R.C.S.
Surgeon to the Hospital.

LECTURE IX.

AMPUTATION OF FOOT — CARIES OF TARSUS — WOUND OF KNEE-JOINT—GANGRENE OF FOOT —TETANUS FOLLOWING BURN.

GENTLEMEN,—I shall occupy the greater part of to-day's Lecture with some miscellaneous cases which have occurred since we last met.

First, let me mention the sequel of one case which I narrated in my last Lecture, that of the young woman who was the subject of excision of the knee-joint. She has left the Hospital well. The wound was healed at the expiration of two months, and she was permitted to move about the ward with assistance, the knee being encased in gutta-percha for protection. There is no deformity and very little shortening. The anchylosis is firm, and the patella immoveable; pressure produces no inconvenience. Her health is quite re-established.

I have recently, in two instances, removed the foot at the ankle-joint, and will, therefore, take the present opportunity of making a few remarks on this valuable operation. I will first narrate the cases.

The case of G. W., a boy, aged 12, I briefly referred to in a former Lecture (a). He was re-admitted into the Hospital in August of last year. Two years since he sprained his right foot severely, and was thereby incapacitated from using it without pain, though he continued to get about for a time. This lad had been an inmate of the Hospital on two previous occasions, with sinuses around the ankle joint, but, apparently, not communicating with the joint. On each of these occasions an exploratory operation had been performed, and some dead and carious fragments of bone removed from the back of the astragalus, and the interval between that bone and the os calcis. He was able to get about, and it was hoped that the foot might be saved, as there was no satisfactory evidence of active mischief in the ankle-joint, which admitted of pretty free motion, without much pain. On the last occasion (February 2) the incision, which was carried down to the interval between the os calcis and astragalus, was kept open by introducing a plug of lint to the bottom of the wound; for the strong interosseous ligament of that region was destroyed by ulceration, and the neighbouring bone was carious. Still no permanent benefit resulted from this operation, and it was therefore determined to remove the foot at the ankle-joint. This operation was performed according to Mr. Symes' directions, with a trifling modification suggested, I think by Mr. Quain, of which mention will presently be made. A small angular portion of the flap first sloughed, and subsequently a considerable mass of partially-disorganised areolar tissue and the margin of the flap separated, after which union took place rapidly, and in the course of a fortnight the boy was up. It should be remarked that there was very little tendency to bleed at the time of the operation. An ulcerated opening at the back of the heel, which existed before the operation, continued to discharge until the flap had cicatrised, and then healed.

The ankle-joint was found to be in an advanced state of disease, in addition to extensive caries between the astragalus and os calcis.

E. M., a pallid young woman, aged 23, was admitted on March 23, 1861. Her history is that between four and five years since, she had an attack of rheumatism, affecting simultaneously the right ankle, left elbow, and shoulders. The pain soon left the upper extremities, but the ankle became very much swollen and stiff. After some months abscesses formed around the joint, which have continued to discharge till the present time. Having satisfied myself in this case that the ankle-joint was irremediably disorganised, and as the young woman's health was seriously deranged, I did not hesitate to recommend amputation of the foot. This operation was performed on April 19, and the stump is now nearly healed; although, as in the former case, there was sloughing of a considerable border of the flap, including a portion of the fatty pad within.

The great advantage of this operation is, that by it a serviceable leg is preserved, and a firm support afforded, to which an artificial foot may be adapted; and thus the patient is enabled to walk with comfort and comparative facility, to say nothing of the appearance, which, though secondary, is nevertheless a consideration; for no one likes to appear mutilated, if it can be avoided. I am satisfied with Mr. Syme's directions for the operation, with a trifling addition, already alluded to. The anterior incision should extend in an oval direction from the point of one malleolus to that of the other, securing just sufficient front flap to extend well beyond the base of the tibia; more is undesirable, as the cicatrix must be anterior to the seat of pressure. The lower incision—*i.e.*, the anterior margin of the posterior flap—should be directly beneath the malleoli, and extend transversely across from one to the other; and this incision should be carried freely and at once down to the bone. The subsequent dissection is facilitated by another incision carried downwards and backwards, and from the outer point of union of the two flaps,—that is, towards the tuberosity of the os calcis. The skin should be peeled carefully from the heel-bone until the great tendon is reached; and this requires both time and caution to effect. Then the ankle-joint may be dislocated from the front, and the tendo-Achillis is the last part to be divided. The malleoli must be sawn off, and also, if diseased, the articular surface of the tibia. Mr. Syme attaches importance to the division of the plantar arteries, subsequent to the bifurcation of the posterior tibial. Whether the frequent sloughing of a portion of the under flap is due to inattention to this advice, I am not prepared to say; but that such sloughing is usual, my own experience has taught me; though in no instance has it interfered with the subsequent well-doing of the stump. Nevertheless, this probable contingency is a reason for having an ample back flap. In both of the above cases a considerable mass of the fatty pad separated with a border of the flap, and altogether the appearance of the stump for a day or two was not very encouraging; yet, with careful dressing, I was surprised to find how speedily it recovered. In the first case on which I performed this operation, I remember that the slough and entire looseness and separation of the flap, a week after the operation, rather disconcerted me; but it turned out remarkably well afterwards. The small angular flap, left by the third incision, is almost sure to slough; but this is of no consequence,—indeed, it is rather redundant, and its loss admits of the more ready drainage of the secretion. Often, as in the cases I have related, there are sinuses around the diseased joint. It is not necessary to pay any particular attention to these,—they also afford an exit for the pus; but if there be any diseased granulations in the flap or about the end of the tibia, I recommend their careful removal, as in cases of excision of joints.

The disease to which this operation is most appropriate, is where the astragalus and os calcis are involved, with or without affection of the ankle-joint; the mere presence of a sequestrum in either of these bones may, of course, be dealt with by its removal; and the diagnosis in such case is not always easy. It would be mortifying to find, after removal of the foot, that the simpler operation would have sufficed to afford relief; and this possible dilemma induced me to delay operating in the former of these two cases; in the latter there was little or no question.

My experience in the two modifications of this operation is very limited. It may be desirable in some instances to leave the astragalus, and in others to saw through the os calcis, and adapt its tuberosity to the base of the tibia; but I do not see any special advantage which either of these operations presents over the disarticulation at the joint; for the curtailed length of the limb can be readily compensated for, in the adaptation of the artificial foot.

In connexion with this subject, I may mention two cases of caries of the tarsus which I have recently treated on the same principle as we should treat a sinus in soft parts; I mean by freely dilating the external opening, and encouraging granulation from the bottom of the wound by keeping it

(a) Case 5, in Lecture for February 16, p. 165.

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plugged with lint. In one case, that of a young man, in whom the disease was limited to the cuboid bone, the cure was completed in a month, although the disease had existed for eighteen months. In the other case, that of a child, the disease is more extensive, and is still under treatment; but the improvement is so marked, that I anticipate a speedy recovery. As I have before remarked to you, I think the use of the gouge in these cases is attended with more injury than benefit; for it seems to me impossible to do violence to an inflamed texture such as cancellated bone, without entailing further mischief, though the free external opening such an operation requires is an advantage in the subsequent treatment of the case.

Many of you have watched with interest a case of acute inflammation of the knee-joint resulting from injury. I will briefly give you the history, as illustrating the ordinary course and issue, when favourable, of such cases:—

H. C., aged 12, employed on board a lighter, was admitted on March 18, 1861. About two hours previously he struck his knee with the point of a bill-hook, which entered the joint above the patella, inflicting a contused wound about an inch long. This was immediately closed, and the limb was placed on a splint, and strict rest enforced: cold lotion to the joint. The wound had bled freely previous to his admission. On the following day there was some swelling, and scarcely any pain. On the fourth day the knee was more tender, and, as it was evident that a slough would separate, the dressing was removed and a poultice substituted. On the seventh day, synovia was escaping freely from the wound; the thigh was much swollen, and there was considerable constitutional disturbance. Leeches were applied above the knee, and a purgative was ordered. On the tenth day the swelling was diminished, but the pain was very acute, and the tongue continued much furred, and the pulse rapid. More leeches were applied, and a more nutritious diet was allowed. On the twelfth day the swelling had further diminished, and the febrile excitement was less; the joint had a more solid feel, and the weeping of synovia had decreased. On the fourteenth day, the synovia which escaped was turbid, from the admixture of flakes of lymph; and in two or three days afterwards the discharge was purulent. The constitutional symptoms gradually improved; but the boy was much prostrated, and required wine and tonics, in addition to a light, nutritious diet. At the end of three weeks there was considerable inflammation around the joint, the precursor of an abscess which formed, and was opened on the outer side above the joint, but communicating with it. The original wound then gradually healed, the discharge from the fresh opening being abundant. Shortly afterwards another collection of pus was evacuated over the head of the tibia. The patella became almost immoveable, and was still very tender on pressure. The limb was kept nearly straight until recently, and at rest. Any attempt at passive motion was attended with so much pain, that it was desisted from. When the discharge ceased, the joint was enveloped in gutta percha, and the boy was allowed to go about the ward.

In cases like the foregoing, where an early opportunity of treatment is afforded, it is wise to close the opening into the joint speedily and effectually. I have succeeded, in this way, in warding off very serious results, where the knee-joint has been extensively laid open by a clean cut. In the present instance, the effort was rendered unavailing by the contused nature of the wound; and though the coagulum assisted for a time in cutting off the communication with the joint, its subsequent separation, together with a slough, entailed the consequences which have been described. The constitutional disturbance was such as was to be expected in this injury. The gradual conversion of the discharge into pus was interesting to watch; the limpid synovia first becoming opaque, subsequently mixed with flakes of lymph, and finally pus taking its place. The position of the wound on the front of the knee, rendered it difficult for the purulent secretion from so large a surface to escape, especially when granulations partially closed the orifice; and thence the formation of abscess at other points. I contemplated from the beginning the probable anchylosis of the joint, and therefore placed it in the most favourable position—viz., very slightly flexed. There is motion, but to a very limited extent; and I do not anticipate that this will be increased, the extreme tenderness of the joint forbidding passive motion, at any rate for the present.

The following case of *spontaneous gangrene* is still under treatment in the Hospital:—J. B., aged 63, a coal-porter, was admitted on April 10, 1861. He stated that his foot had been swollen and tender for some weeks, but that he continued his work. He had been bruised at different times by falling coals, and, when admitted, there was a dark spot on the ungual phalanx of the great toe, and another on the back of the tarsus. He looked pallid and feeble, and his heart's action was weak and irregular, but without morbid sound; the arteries of the thighs were hard and resisting, evidently atheromatous, if not the seat of calcareous deposit. He was ordered bark and ammonia, and an anodyne at night; liberal diet, with ale. The gangrenous spot, however, extended, and in the course of a fortnight the entire foot was involved. Notwithstanding wine and gin, in addition to his beer (though he said he had not been a hard drinker), his pulse continued feeble and irregular. In three weeks separation of the foot commenced, and in a fortnight afterwards it was removed at the ankle-joint by simply dividing the ligaments and tendons. Since then there has been irregular sloughing, extending upwards over the fibula, and the patient's condition has remained much the same, evincing a low, asthenic state, with very feeble and irregular action of the heart, although a considerable quantity of nourishment and stimulus have been taken.

The exciting cause of the gangrene in this case was trivial, but there existed a well-marked predisposing cause in the state of the heart and arteries. I believe that there is fatty degeneration of the heart, although no abnormal sound is present to denote valvular disease. The arteries are also, probably, seriously deteriorated in structure, having lost their elasticity through atheromatous and calcareous conversion. I have not discovered the presence of any other organic disease. It may be naturally asked why I did not amputate, according to rule, when the line of separation was well-marked. It was because I anticipated, even if his extreme feebleness enabled him to rally from the operation, that there would be a sloughing stump. The extension of mischief since the removal of the foot has justified this fear; and I am still waiting, with a faint hope that his *general* condition may admit of the adoption of this alternative.

Another instance, in some respects parallel, has just terminated fatally in the same ward. The patient was a gentleman's coachman, and had one toe frost-bitten in the winter. He was sent into the Hospital, a few weeks since, with a burrowing abscess extending into the sole of the foot. This was opened freely, and some sloughing tendon removed. I expected he would then speedily get well. But, apparently without cause, a circumscribed spot of gangrene made its appearance on the inner side of the foot, and the patient sank, at last very rapidly, and before the mortification had extended very far. In this instance the arteries were found generally diseased; and those of the affected limb were almost entirely calcareous. He had also disease of one kidney.

On April 9 several lads were burnt, more or less severely, while engaged in the manufacture of lucifer-matches. Two or three of the worst cases were admitted, and others had their injuries dressed and were sent home. On the 22nd, thirteen days afterwards, one of the latter was brought to the Hospital with tetanus. Three days before admission the first symptom of stiffness of the jaw made its appearance. There was an extensive suppurating wound of the upper arm, looking tolerably healthy. The biceps was rigid; the mouth firmly but not closely shut; frequent opisthotonos; pulse 112, of tolerable strength; pupils rather dilated; abundant perspiration. He complained of most pain in the back and neck, and could swallow with tolerable facility. Having recently heard of the successful treatment of a case of acute tetanus by aconite, I determined to try its effect in this, and ordered five minims of the tincture to be taken every six hours; and to obtain, at the same time, the influence of opium, I prescribed a lotion, consisting of a drachm of the watery extract to a pint of water, to be applied to the wound. But the paroxysms of general rigidity became more frequent, and the poor fellow, a fine lad of eighteen, died on the same evening. His case was complicated by bronchitis, consequent on the wetting to which he was subjected at the time of the accident. He took but one dose of the aconite.

About a week afterwards, another of these boys, an inmate of the Hospital, was also attacked with tetanus, and died.

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I do not infer, from this coincidence, that there is anything peculiar in the burn from phosphorus; but it is a curious coincidence, as tetanus is not at all a common sequence of burns. It seems rather to confirm what I have noticed before, that at certain times, from some unknown cause, tetanus, as well as some other fatal diseases, is more rife than usual.

An interesting case of necrosis of the frontal bone, in which the skull was trephined last summer, is now under my care; but, as I believe the case will shortly be published, I will not detain you with its details further than to say that I have removed a large fragment of dead bone from around the seat of operation, and that the case is doing well.

ORIGINAL COMMUNICATIONS.

CASE OF CRANIOTOMY.

By ROBERT LEE, M.D., F.R.S.
Obstetric Physician to St. George's Hospital.

At 8 p.m., in September, 1857, I received the following letter:—

"My dear Sir,—Will you do me the favour to accompany the bearer to the above address, bringing with you the long forceps and instruments for opening the head?

"I am, dear Sir, yours truly."

I went immediately to the patient with the short forceps, the perforator, and the crotchet. I found two Practitioners in attendance. The patient was twenty-eight years of age; it was the first pregnancy, and it was the end of the ninth month. The bones of the legs were bent from rickets in early life. When young, she was run over by a carriage, and it has been supposed that the pelvis was injured. Labour had commenced at ten o'clock the night before, and for several days previously she had suffered from irregular pains. Mr. —— saw her early this morning—about three o'clock. He states that he found the os uteri very little dilated, and that the dilatation has been gradually progressing, and "now a bag of membrane is protruding." The os uteri I found fully dilated, the membranes protruding through the orifice. The head was felt through the membranes above the brim. I could, but with some difficulty, reach the base of the sacrum with the point of the forefinger, and from this I inferred that the pelvis was only slightly distorted, and that if the head of the child was small it might pass through the brim and outlet without either the long or the short forceps.

I recommended delaying for a time, to see what Nature could do, but entreated that the case might not be left too long to Nature. Fourteen hours after, I was again desired to see the patient. I found her greatly exhausted, and the head so firmly impacted in the brim, and that no hope remained that it would ever get through the brim without artificial assistance. It was agreed, in consultation with the other two Practitioners in attendance, that, to save the life of the mother, it was necessary, without delay, to have recourse to the perforator and crotchet. After the use of the perforator, great and long-continued efforts were employed before I could succeed in bringing the head into the cavity of the pelvis. The delivery was at last safely accomplished, and the patient recovered in the most favourable manner.

At the time this case occurred, Mr. Figg's paper, in which it was proposed that the operation of turning should be employed in all cases of natural labour because "the feet of the foal come first," had just been published in the *Medical Times and Gazette* at the request of Dr. Simpson. The proposal to abolish craniotomy from obstetric practice had not then been made by the President of the Obstetrical Society. The conception of this body of experienced and sound Accoucheurs had not then taken place, and at the same time I had never heard of the great fame of Mr. Druitt as an Accoucheur, and stood in no awe of a Coroner's Inquest on the dead fœtus, and being brought to account before the whole world for the sacrifice of its invaluable life, if it was alive. In 1857 I acted upon the common principles of morality and humanity, as I shall ever do and inculcate in my lectures and writings. I would then not have employed the long forceps, nor forced back the head and ruptured the uterus in turning, as I have seen done by others.

On June 25, 1858, I received the following letter from a very respectable Medical Practitioner who lives in a remote country town:—

"Dear Sir,—Would you kindly inform me if you have any recollection of the case referred to in the enclosed note, and whether the opinion attributed to you be correct; as I have been requested to induce premature labour, in consequence of the advice said to have been given by yourself and her other Medical attendants after her former protracted and instrumental labour? I would not trespass on your time, but there are some circumstances which render a certain degree of caution necessary before undertaking the operation in question.

"I remain, dear Sir, yours very faithfully,

"———— ————."

The following is the note here referred to:—

"June 23, 1858.

"Dear Sir,—Having written a note, which has not been posted, I write another to inform you that about the latter end of September last Mrs. —— was delivered of a full-grown fœtus at —— by craniotomy. The Medical attendants were Drs. —— and Dr. Robert Lee, of Savile-row, London (the operator). These gentlemen declared to Mrs. ——, her mother, myself, and others, that unless premature labour be induced on Mrs. —— at the sixth month of gestation (and not later on any consideration) the dreadful alternative of craniotomy would be the consequence again. Mrs. —— has not menstruated since the beginning of January last, she has increased considerably in size, and the fœtus having quickened some time past, it is evident that the advice of these gentlemen must be adopted the early part of next month, for I would not run the risk of another operation of the kind for all the world.

"Yours truly, ————"

Induction of Premature Labour in the Second Pregnancy.

On June 25, 1858, this patient being in the 7½ month of pregnancy, premature labour was induced at a distance from London, and the child was born alive by the natural efforts, but did not live long.

Third Labour.

On January 9, 1860, this patient was again 7½ months pregnant, and came to London to have premature labour induced by me. The day was fixed for the operation, but the labour came on spontaneously the day before, and the child was born alive by the natural efforts and lived a month.

Induction of Premature Labour in the Fourth Pregnancy.

On Saturday April 20, 1861, the same patient being in the 7½ month of her fourth pregnancy, I passed up the stiletted catheter into the uterus with great ease and punctured the membranes. On the 22nd there was slight pain, and the os uteri was beginning to open. On Tuesday the 23rd April labour was safely completed by the natural efforts, and the child was born alive, and is now (May 6, 1861) alive.

4, Savile-row, Burlington Gardens.

P.S.—I have rarely, if ever, performed the operation of craniotomy, or applied the forceps, without previously holding a consultation with some other Practitioner.

CASE OF CONCUSSION OF THE BRAIN.

By JAMES YOUNG, M.D. Edin.

Among the more rare affections of the brain may be classed chronic cerebral abscess, a case of which I published in the *Edinburgh Medical Journal* in the year 1855.

The inflammation in the case alluded to resulted in the formation of a chronic abscess near the centre of the right hemisphere of the cerebrum.

The peculiar features of this case were, that the abscess (judging from the fetid character of the pus) was probably of some months' duration; while the hemiplegia, followed by coma, did not supervene till near death. The second feature was, that the lesion and the paralysis were on the same side of the body.

Professor Syme, in his "Principles of Surgery" (p. 406), establishes the existence of such a lesion in this exquisitely-delicate organ without the manifestation of any grave symptom. He says: "Sometimes the inflammation assumes

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a chronic form, which, though not attended with much danger, is very distressing, and may lead to permanent affections of a very unpleasant kind."

Thus may be seen how a serious lesion may exist without symptoms of any great magnitude. In the following case of cerebral concussion, we have the state of matters reversed, where the symptoms, though temporary, were serious, with a slight amount of functional disturbance, and no organic lesion.

The particulars of the case are as follows:—

J. L., aged 3 years, had climbed on the top of a chest of drawers, some five feet from the ground; having lost her balance, she fell on her head. Her mother immediately raised her on her knee, when she cried, but soon fell asleep. She was carried to bed two hours afterwards, and slept for twelve consecutive hours. At nine o'clock next morning she appeared dull and heavy, and towards evening she became worse. I saw her that night (March 25) about nine o'clock, and found her evidently suffering from symptoms of cerebral concussion, my diagnosis being strengthened on hearing the history of the case. The pulse was quick and weak; she was drowsy, but partially conscious; breathing laboured; pupils contracted, but affected by light. She occasionally started and screamed, and involuntarily threw her hands toward her head, as if suffering pain.

Treatment.—Leeches to be applied to the temples, and cold to the head, an enema to be administered, and a few grains of calomel and scammony. Next morning (March 26) she was much better, breathing easier, and consciousness partially restored. During that day and Wednesday she continued to improve, and no urgent treatment was adopted. I was hurriedly sent for on Thursday morning to see the little patient. At 10 a.m. she was much worse: pulse weak, breathing heavier, with partial insensibility. I immediately ordered a fly-blister to be applied over the whole calvarium, the head being previously shaved. By the afternoon she was greatly improved, and on the following Monday she was quite convalescent.

There exists a strong similarity between this case, in its nature and treatment, and Case 1, at page 5, in Mr. Spence's pamphlet,—"Scalp Wounds Complicated with Concussion." In the latter, the symptoms of concussion returned on the fifth day, and only yielded to the application of a blister. From the cases published by Mr. Spence, likewise from one which occurred in my father's practice, where partial, if not complete, insensibility from concussion (without compression) existed forty-eight hours, with ultimate recovery, and from the case above related, I, with deference, would be disposed to draw a different conclusion from that arrived at by Professor Syme on the same subject:—"If there is no laceration of the cerebral substance or membranes, the patient merely suffers a temporary diminution or suspension of the functions of that organ." Professor Syme adds: "In slight cases, we have confusion for a few minutes; and in more severe shocks, the insensibility lasts for ten or twenty minutes, unless followed by inflammation" (a).

From the cases to which I have referred, it will be evident that the semi-consciousness attendant on cerebral concussion may continue for a much longer period than ten or twenty minutes; yea, has been prolonged to forty-eight hours, and in some cases more or less continuously for ten days, without any trace of symptoms of compression.

36, Castle-street, Edinburgh.

University of Dublin.—At the Summer Commencement held in the Examination Hall of Trinity College, on Wednesday, the 26th inst., the following degrees in Medicine and Surgery were conferred:—*Baccalaurei in Medicinâ:* Edvardus B. Sinclair, Thomas Berkeley Beatty, Gough Ashton, Alexander Ferrier Churchill, Thomas Wrigley Grimshaw, Abrahamus Irwin Bolton, Henricus Pomeroy Truell, Edvardus M'Conkey M'Cready, Johannes Madden. *Magistri in Chirurgiâ:* Thomas Wrigley Grimshaw, Ricardus Griffith, Howard B. Montgomery. *Doctores in Medicinâ:* Edvardus B. Sinclair, Thomas Berkeley Beatty, Franciscus Ricardus Cruise, Henricus L. Dwyer. At an examination recently held, the first Medical Scholarship was obtained by Mr. William Smith. The second Scholarship has not yet been awarded.

(a) "Principles," p. 405.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

CONDUCTED BY
JONATHAN HUTCHINSON,
Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital,
AND BY
J. HUGHLINGS JACKSON, M.D.

KING'S COLLEGE HOSPITAL.

PROBABLE OBLITERATION OF THE URETHRA AFTER INJURY—FORCIBLE CATHETERISM.

(Under the care of Mr. FERGUSSON.)

[Report by Mr. Charles S. Matthews, late House Surgeon.]

In the following case it seems fair to assume that the urethra had been practically obliterated. No urine whatever had been passed per urethram between the dates of the accident and of Mr. Fergusson's operation, with the exception that, on two occasions, a few drops had followed a forcible attempt at catheterism.

J. B., aged 22, a seaman. He states that in September, 1858, he fell from the rigging of a ship, and, besides breaking his right leg, he sustained a severe blow in the perinæum. He was put on board a man-of-war, and had splints applied to his leg. Three days afterwards a small wound was discovered in the perinæum, through which he passed the whole of his water.

He was now sent on shore into the Hospital at Hong Kong. Two months after this some small abscesses formed in the perinæum, which were opened in three places by a Dutch Surgeon. The urine immediately began to pass through the openings thus made, which it has continued to do ever since, the original wound closing up rapidly. He remained eight months in Hong Kong, then, returning to England, was admitted into King's College Hospital, under Mr. Fergusson, December 15, 1859. On admission, there were three fistulous apertures in the perinæum, two on the left and one on the right side of the median line. Through these the whole of the urine was passed, none coming away by the natural passage since the accident. No catheter has ever been passed into the bladder since the accident.

December 22.—Mr. Fergusson attempted to pass a catheter to-day, but was not successful.

January 8.—Mr. Fergusson again failed to pass a catheter, the patient being under chloroform. The point of the instrument seemed to be arrested at the bulbous portion of the urethra.

17th.—Nearly a pint of urine now passes daily by the urethra. Mr. Fergusson was again foiled in his attempt to pass an instrument.

21st.—The patient was to-day again placed under the influence of chloroform, when Mr. Fergusson, after several attempts, at length succeeded in passing a No. 5 catheter (silver) into the bladder. Some little force was necessary for the introduction of the instrument. The catheter was not tied in in the theatre, and, unfortunately, it slipped out of the bladder in the passage to the ward. The man suffered little or none from the operation, and continued to pass about half his urine by the natural canal.

February 11.—Chloroform having again been administered, Mr. Fergusson succeeded, with much difficulty, in passing the same No. 5 catheter. This was now secured in the bladder and the patient removed to bed.

24th.—It was noticed this morning that the pressure of the catheter had caused a small slough and fistulous opening into the urethra, at the root of the penis. All the urine passes by the catheter.

28th.—The instrument, which had been kept secured in the bladder up to this date, was to-day removed, and Nos. 6, 7, and 10 successively introduced and withdrawn.

During the next few days he had occasional retention of urine, which was relieved by a catheter, introduced readily.

March 16.—A few drops only of urine now pass occasionally through the perinæal openings. Micturition causes him no pain. The fistula at the root of the penis is contracting.

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This patient was discharged in May, 1860, having had two operations performed for the cure of the fistula in the urethra, which were, however, only partially successful. On his discharge, the fistulous openings in the perinæum, through which the urine passed when he came into the Hospital, had quite healed up. He holds his water well and passes it in a full stream, a very little trickling through the fistula at the root of the penis, this having so far contracted as to cause him little or no inconvenience.

CHELSEA WORKHOUSE INFIRMARY.

ABDOMINAL SECTION FOR THE RELIEF OF INTESTINAL OBSTRUCTION—FATAL RESULT.

[Communicated by GEORGE LAWSON, F.R.C.S.]

Elizabeth E., aged 56, unmarried. Has had three children, the youngest of whom is 20 years of age. By occupation a laundress. She always had good health until four weeks ago, when she was seized suddenly with vomiting and diarrhœa. Under Medical treatment the latter subsided, but the vomitting continued, everything she took was immediately rejected. She had got thirst and severe abdominal pain.

On April 15 she was admitted into the Infirmary of the Chelsea Workhouse under the care of Mr. T. Dickinson. Her symptoms were then as follows:—She complained of severe pain about the umbilicus, and over the abdomen generally; but pressure with the hand did not produce or increase the pain. The abdomen was tympanitic and distended; the countenance pinched and haggard; the tongue covered with a brown fur, and the pulse 116. She was ordered a brisk purge, and brandy with beef-tea was freely administered to her. The following morning the bowels acted three times, but the vomiting still continued. Opiates were now given, but without affording any great relief. The vomiting became less frequent, but no action of the bowels again took place. On April 22, six days since the last evacuation, she had regular stercoraceous vomiting, and this continued until April 24 when, at Mr. T. Dickinson's request, I first saw her. Her condition then was the following:—She was vomiting stercoraceous matter almost continuously, with intervals never exceeding half-an-hour. The abdomen was of an enormous size, and through its walls, the small intestine, greatly distended, could be distinguished by the transverse rugæ which marked the whole abdomen, and their peristaltic action could be clearly made out by the undulatory movements of the transverse ridges. Handling the abdomen increased the peristaltic action of the bowels. The abdomen was slightly tender on pressure with the hand, but not so tender as is seen when peritonitis is established; it was sufficient to say that peritonitis was probably coming on, or the evidently distended state of the intestines might account for the slight increase of pain which manual pressure produced.

She complained greatly of pain within the abdomen although she could not distinctly localize it.—Taking all the symptoms together, I fully concurred with Mr. T. Dickinson in regarding the case as one of mechanical obstruction, but whether it was produced by a band or by some other constricting cause I could not say. From being able to trace through the integuments the distended small intestine over the whole surface of the abdominal cavity, I came to the conclusion that the seat of the obstruction was either close to the termination of the small intestine, or else somewhere in the colon. As Medical treatment had proved of no avail, I suggested to the woman that she should allow a search to be made for the cause of the obstruction, at the same time explaining to her the necessary risk which such an operation entailed. She immediately acquiesced. Before operating I had the advantage of the opinion of Dr. Buzzard and Mr. Henry Smith, both of whom agreed in the advisability of the operation and in considering that it gave her a chance (although a slight one) of recovery. Accordingly with their assistance and that of Mr. T. Dickinson, I proceeded at once to operate.

The patient having been put under the influence of chloroform by Dr. Anstie, I opened the abdomen by an incision extending from just below the umbilicus to the pubes, then passing my hand into the right iliac fossa to examine the condition of the termination of the small intestine, it came upon a hardened mass of intestine. In order to make a visual examination of the parts I prolonged the incision to about two inches above the umbilicus, and the parts in the right iliac fossa were then brought more clearly to view. It was then found that the small intestines which were of a dusky red colour from incipient peritonitis continued enormously distended as far as the cæcum, but from that point no distended intestine was seen. At the junction of the ileum with the cæcum was a hardened mass, and the whole cæcum presented a peculiar thickened and altered condition both to the eye and the hand.

The colon was not seen, as the small intestine was apparently in front of it, and having found the seat of the obstruction a further search was deemed unadvisable. We each agreed that the obstruction was within the intestinal geanal, and caused probably by some malignant deposit. I therefore immediately returned the intestines, and with sutures and hare-lip pins closed the abdominal walls. The patient speedily rallied from the chloroform, but she died nine hours after the operation.

Post-mortem Examination, Twenty-four Hours after Death.—On re-opening the abdomen, the small intestine distended with fæces to about three times their original diameter, and measuring in circumference over five inches, occupied the whole of the front portion of the cavity of the abdomen. Tracing them down to the cæcum the distension was found suddenly to cease, and at this point was felt a hardened mass. The cæcum was small, but much thickened, and the appendix vermiformis was elongated, distended and coiled upon itself. Passing from the cæcum was the colon, which lay behind the small intestines, perfectly flaccid, of a pale colour, and so contracted as to appear more like a portion of the œsophagus. The whole of the small intestines were of a dusky red colour, showing that peritonitis had existed, but that as yet there had been no effusion either of fibrine or of serum. On making a section of the lower end of the ileum, cæcum, and portion of the ascending colon, the following was seen:—At the site occupied in the normal condition by the ileo-cæcal valve was a dense scirrhus stricture, which occluded entirely the intestinal tube at this point:—not even water could pass—The walls of the cæcum were thick and hard and infiltrated with schirrhus deposit. The appendix vermiformis, much elongated and distended, communicated with the ileum through an ulcerated opening, and also through its normal aperture with the cæcum, so that a small circuitous passage still remained, by which soft material might have passed, by travelling through the new channel between the ileum and the appendix vermiformis, and so on into the cæcum, but this route was blocked up with feculent matter.

LIVERPOOL ROYAL INFIRMARY.

LACERATED WOUND OF ARM — RUPTURE OF THE MIDDLE AND INTERNAL COATS OF THE BRACHIAL ARTERY — LIGATURE OF THE ARTERY—TRISMUS—DEATH.

(Under the care of Mr. BICKERSTETH.)

[Reported by Mr. R. HARRISON, House-Surgeon.]

James E., aged 36, was admitted on May 8, suffering from a lacerated wound of the upper arm in consequence of having been bitten by a horse. He stated that while engaged in the stable, his pony seized him by the arm, shook him violently, and would not relax his hold until struck on the nose with a hatchet.

On admission, there was a deep and ragged wound on the inner side of the arm immediately above the elbow. The biceps and brachialis anticus muscles were both considerably torn, and the brachial artery and median nerve completely exposed—the latter for about three inches of its course. No pulse could be felt at the wrist, and upon examining the artery at the seat of injury, a firm, unyielding obstacle could be felt blocking up the vessel and entirely controlling the circulation, as pulsation could only be felt above this point. The functions of the median nerve were entirely suspended, and he could only recognise impressions in the parts of the hand supplied by the ulnar nerve. The temperature of his forearm was palpably diminished.

Mr. Bickersteth tied the artery above and below the seat of injury, and removed the part included between the two

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ligatures. Very little dissection was required, as the parts were fully exposed. The wound was brought together with iron-wire sutures, one small articular artery requiring a ligature. On examining the injured part of the artery, the external coat was found entire, but the internal and middle had been severed across and with some coagulated blood had entirely blocked up the artery.

May 9, 10 a.m.—The temperature of the forearm had returned, and the suspended functions of the median nerve were being gradually restored. He progressed favourably until May 14 (the sixth day after the operation), when he had a slight attack of nettle-rash, and in the evening began to complain of stiffness in the jaw and inability to swallow. The arm was swollen and exceedingly painful, and the wound had lost its healthy appearance. His bowels had been freely opened spontaneously. Pulse soft, 95.

15th.—Passed a restless night. The stiffness about the jaws and difficulty in swallowing had much increased, and he was quite unable to protrude his tongue. Countenance anxious; pulse 105, much weaker. The arm was in a state of phlegmonous inflammation, and the wound sloughy and discharging large quantities of unhealthy matter. He was ordered five grains of calomel with twenty of the pulv. jalapæ co., and as soon as it had produced the desired effect, to take forty minims of the tincture of Indian hemp every four hours. Brandy, wine, and beef-tea *ad libitum*.

16th.—Much weaker. The nettle rash again made its appearance. Indian hemp increased to ʒj. every four hours.

17th.—Countenance very anxious. Mucus collects in his bronchi, and his endeavours to expectorate are most painful. The fixed condition of the jaw still remains, and he has had one or two slight tetanic convulsions.

18th.—Died about four p.m., after a very severe paroxysm of coughing. It is worthy of remark that, three hours before his death, the fixed condition of the jaw passed away, and he was able to open his mouth.

Remarks.—In speaking upon this case, Mr. Bickersteth called the attention of the students to the most interesting features of the injury inflicted upon the artery and median nerve, and criticised the treatment he had adopted. The artery had apparently been subjected to direct pressure between the teeth of the horse, for, although neither divided or altered in its external form, the circulation through it abruptly ceased at the point of injury, and a firm clot could be felt in its interior at this spot. The strongest presumptive evidence thus existed that the internal and middle coats of the vessel were divided; that they had contracted and retracted, and thus had led to the formation of a clot, which shortly resulted in complete obstruction to the circulation. It might have been safe to leave the vessel alone under these circumstances, but to do so would have been to run a considerable risk of hæmorrhage from sloughing of the external coat, and a still greater risk of the formation of a false aneurism. The artery was, therefore, tied above and below the injured part, and as no harm could result from its removal, and it was interesting to examine the interior of the vessel, the portion was removed. As expected, both inner coats were found completely divided, though in a rather jagged and irregular manner.

The median nerve was dissected and deprived of its sheath for nearly three inches of its course; all the parts supplied to it were paralysed, yet as no injury to the fibres of the nerve could be discovered, it appeared reasonable to suppose that the paralysis depended upon the contusion and concussion to which it had been subjected, and that if so it would shortly be recovered from. So it was; for in less than twenty-four hours the man regained sensation in the fingers and hand. Some might have thought that with such extensive injury to the artery and nerve, it would have been the safest course to amputate the limb; yet as the man was in the prime of life, had a robust healthy appearance, and, moreover, had lived temperately, Mr. Bickersteth thought it right to endeavour to save the limb. The result proved, however, that these hopes, though well founded, were fallacious.

Phlegmonous inflammation of the whole arm came on, the wound became sloughy, and the patient sank, having been affected for the last four days with trismus, and occasionally with slight tetanic spasms. Mr. Bickersteth called attention to the fact that, contrary to the usual practice of Surgeons when treating extensive lacerated wounds involving vessels and nerves, he had not in this instance given regular doses of opium. It was not his practice to administer opium in such cases, or after surgical operations, unless pain or marked symptoms of nervous irritation existed, and then no one could question the great benefit and comfort derived from the judicious use of this drug. When these symptoms were not prominent, and there was no great amount of pain, he believed that opium generally did harm by disordering the stomach and arresting the secretions. He was convinced by large experience, both in Hospital and private practice, that absolute quietness, together with a good nurse, to soothe, manage, and encourage the patient, would, in the majority of cases, effect all that was wanted without running the risk of disordering the digestive organs. At the same time, he did not wish to disguise the reputation that opium has long held in lessening the liability to the occurrence of tetanus. He had heard his colleague, Mr. Halton, remark that since he had made a rule of giving regular doses of opium in all cases of contused lacerated wounds of the extremities, not a single case of tetanus had occurred in his practice, whereas previously such cases were not infrequent.

Medical Times and Gazette.

SATURDAY, JUNE 29.

RESPONSIBILITY:
GATTIE AND WIFE *versus* HALFORD.

The Court of Exchequer was occupied during two days last week in trying an action brought, as we learn from the *Times*, by a Mr. Gattie and his wife against Mr. Edward Halford, Surgeon, of Hammersmith: first, for the alleged negligent, improper, and unnecessary use of instruments in Mrs. Gattie's confinement, through which she was not only stated to have lost her child, but to have been suffering numbness and lameness ever since, owing to an injury of some of the nerves passing downwards from the pelvis; secondly, for an alleged breach of contract,—for it was declared that he had entered into a positive engagement, that if either chloroform or instruments should be necessary, he should have a consultation with Mr. Baker Brown, Dr. Tyler Smith, or Mr. Margetson; but that, spite of his engagement, he had neglected or refused to send for assistance before using the instruments. In addition to certain statements made by the plaintiffs, Drs. Murphy and Barnes and Mr. Margetson are reported to have given evidence that the defendant's practice in using instruments without assistance was wrong, and that he had not administered chloroform in a proper manner. It would be doing an injustice to these gentlemen to assume that we have a full and correct report of their evidence, because nothing appears to warrant the charge of unskilful use of chloroform; and there is nothing to show, in the published report, that the use of forceps was not justified, or that the instrument was unskilfully handled. On the other hand, the evidence of the defendant himself, backed by that of Sir C. Locock and Dr. Ramsbotham, showed that the instruments were properly used for the relief of cramp, and the chloroform likewise; that any assistance beyond that of the nurse was unnecessary; and that there was absolutely no engagement to send for another Doctor in case chloroform or instruments should be necessary. The judge left it to the jury to say whether there had been negligence or unskilfulness or no; and whether there had been any contract or no; and the jury, after an absence of two hours, returned a verdict for the defendant.

Not one of our readers will doubt the justice of the verdict, or fail to sympathise with the defendant for all the trouble which has been brought upon him through the litigious conduct of the plaintiffs. Yet, when we look at the report of the trial, and see that Serjeant Shee, Serjeant

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Petersdorff, Mr. Turner, and Mr. Henry James appeared for the plaintiffs, and Mr. Bovill, Q.C., and Mr. C. Pollock for the defendant; when we think of the expense of attorneys and witnesses, of the anxieties and miseries of delay, and of the evil reports which are sure to be spread before the trial, and which possibly are even now stoutly held to by the plaintiff and his friends after the trial; when we consider the interruption to regular occupations, the sleepless nights, and the pecuniary losses which no "costs" ever cover, we cannot help saying, Would it not have been better to have avoided all this by the simple process of a consultation?

Let us drop all reference to "Gattie *v.* Halford," and treat the thing in general terms. The Practitioner, naturally enough, wishes to have the credit of conducting a difficult case to a conclusion, and he feels nettled at any supposed disparagement of his skill; yet, even though he may feel the fullest confidence in his own knowledge, if he does not possess the clear and undivided confidence of his patient he had better submit to a consultation than risk the blame which will fall upon him in case of a mishap. If such a thing be proposed, it can very seldom be wise to refuse it; on the contrary, it is usually far wiser to seek it spontaneously. A little sacrifice of dignity and self-importance is not misspent if it secure a man against such a trial as that before us. If the Practitioner himself propose a consultation, he can generally select the consultant from among his own friends; and if it should so happen that a consultant selected by the family should give an opinion harsh or unfair to him, he can claim the privilege of calling in a third; and if this be refused, he need have no fear of the adverse opinion of the second. Consultations, we emphatically repeat, to our younger brethren, makes a man safe against false and frivolous accusations. A readiness to agree to them is usually taken by the public as the sign of a cautious, liberal, and conscientious disposition; and we venture to add, they are not often objected to by the men who understand their Profession thoroughly, and are able to give a clear account of their opinions to their own Professional brethren.

Since writing the above, we have received the following remarks from a lawyer of high standing. He says:—

"The case deserves very particular attention, on account of the exposition there laid down as to the existing law of Professional responsibility which the learned judge who lately tried this cause, gave in summing up to the special jury before whom it was decided. The defendant acted as a General Medical Practitioner, and was accused of negligence in attending the plaintiff's wife during her confinement. There was a second count, charging the defendant with a breach of contract; but upon that count the judge expressed an opinion that there was not sufficient evidence of any positive engagement between the parties. The jury afterwards found their verdict for the defendant, and thereby acquitted Mr. Halford of any alleged negligence. Had the finding of the jury, however, been otherwise, then the defendant, not being a Physician, would have become responsible. Mr. Baron Martin said:—

"'Mr. Halford was a General Practitioner, and as such, he was bound to possess proper and adequate skill, and to use that skill in a proper and adequate manner. This was the general rule, and only two classes of Professional men had managed to evade it—namely, Barristers and Physicians.'

"Mr. Halford is an M.D. of St. Andrews, F.R.C.S. England, and L.S.A. Holders of these Medical qualifications must therefore, it is presumed, be henceforward content to exercise their professions, subject to the general rule enunciated by Baron Martin. But, are Licentiates of the Royal Colleges of Physicians of London and Edinburgh, supplying medicines to patients under their own care, virtually included in the legal *dictum* thus expressed? or will they come within one of the judge's exceptions above specified? These questions are truly of very great moment, as well to individual holders of the new qualification, as to those Corporations by whom such diploma is conferred. It would be unfortunate, indeed, to all parties, if, in attempting to acquire one privilege, the Colleges lost by that proceeding the most valuable right they confer—exemption from Professional responsibility. This most important point deserves mature and speedy consideration."

DEATH OF A SOLDIER ON A MARCH.

The second battalion of the Scots Fusilier Guards set out on Wednesday morning, the 18th instant, to march from Kingston to Guildford, a distance of eighteen miles. They started at six, halted every three miles, and breakfasted at Cobham shortly after nine, starting again at half-past ten, and reaching Guildford about two. One of the soldiers, named Norton, "a very sober and healthy man, whose name never appeared on the Hospital books," seemed ill a mile or two on this side of Guildford, and fell back a little; but he soon rallied, and, as his nearest comrade said, "did not appear more distressed than the rest of us." Shortly before reaching Guildford, however, he fell insensible, and was found by the Surgeon to have very little pulse. He was removed into the shade, had some wine, which he swallowed with great difficulty and soon vomited, and was well sluiced with cold water on the head. He revived slightly for a time, insomuch that the eye became slightly sensible to the light, but soon relapsed, and died about six p.m. The cause of death, in the opinion of the Surgeon, was sun-stroke. Five or six men, said the Surgeon, had "fallen out" of the ranks in the earlier part of the day from drinking cold water; five or six others from being foot-sore; and two more from sheer fatigue. Such are the leading facts of the case of poor private Norton, of whom the Coroner's jury at Guildford returned a verdict that he died "from natural causes, death being the result of a sun-stroke, sustained in the march between Kingston and Guildford." But the thing comes like an unpleasant shock upon the public nerves, inasmuch as it shows that that highly expensive and much-cared-for machine, the British soldier, is a delusion; that there he is *in esse*, but that he is simply incompetent to do that which is the business of his life, which is, to march a certain distance with a certain degree of rapidity, in any climate, and carrying a certain weight. As for a walk of eighteen miles, on a summer's morning, with opportunity for an occasional halt, what civilian is there, out of an Hospital, who would look upon it as an extraordinary feat? And as for the carrying of weights, what is there that any soldier ever carried which can compare with the weights which London journeymen bakers used to carry on their backs in all weathers before the recent introduction of the truck? It must be evident that an army which looks on an eighteen mile march as a formidable thing, is an army on paper only, and not fit for service. But we have not far to go before we find the reasons why a picked body of men, chosen for their health and strength, should be unable to execute duties which the civilian world thinks nothing of. The journeyman baker and the bricklayer's labourer work in their shirt-sleeves if they like. Any degree of outward heat seems bearable, if that further amount which is necessarily engendered within the animal body by muscular action can be freely dissipated by evaporation and exposure to the air; but this dissipation of heat is rendered impossible by the soldier's dress.

The unfortunate deceased had on two pairs of trousers: this was his own fault; but the bearskin cap, the stock, the tight tunic, the hot and closely-fitting trousers, and the ill-made boots, were not. Colonel Dalrymple said that the bearskin cap is about the best headdress in hot weather, inasmuch as it screens the head from the rays of the sun, and that the natives of hot climates wear as much on their heads as possible. So they may; but we doubt if the large loosely-fitting turban ever weighs 2lb. 5oz., which we

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are told is the weight of the bearskin, or yet if it be black; besides, the men complain of it, though the officers may like it. The stocks, we are told, were permitted to be taken off during the march: we may ask, Why should they be put on afterwards? We are told that the whole weight carried was 49lb. 12oz., consisting of kit, 19lb. 12oz.; arms and accoutrements, 16lb. 4oz.; bearskin cap, 2lb. 5oz.; clothing, 10lb. 8oz. Altogether, it must be evident that it is not the simple weight so much as the want of freedom and elasticity,—the want of means of getting rid of superfluous heat, and of relieving the muscles by variety of distribution that is to be complained of. It is admitted on all hands that the shape of the boots is villanous; they are not broad enough across the tread, nor well fitting at the ankle. For examples, refer to Mr. Dowie's book on Boots and Shoes. But, after all, the grand source of evil is to be found in the condition, discipline, and entire mode of life of the English soldier. This is well described by "*Noli me Tangere*," in a letter to the *Times*:—"Fed as he is, the British soldier has not half enough of physical work while at home. The result is, that time hangs heavily upon his hands; he is constantly in that mischief of which idleness is the prolific parent; he spends much of his time indoors, in beer-shops, and elsewhere where temptation is great; he is comparatively *soft* and *pursy*, and when work is to be done, it is a hardship instead of a pleasure." Labour, in greater quantity and variety, with extra pay for it, is the remedy; "luxury, idleness, and *tailoring*" the crying evils. We want an army that shall not melt away under an English sun in June.

THE WEEK.

The question of the eligibility of Parsees to compete for Medical offices in the Army was brought before the House of Lords on Friday se'nnight by Lord Monteagle. Their exclusion was justified by Lord Herbert on three grounds:—First, that natives of India, although competent to obtain any situations in India, were not competent for appointments in the general service of the Crown. The second was, that English soldiers would have no confidence in foreign Doctors. The third, that natives of India were unfit for service in all parts of the world. We have already pointed out that it is a miserable ignoration of ethnology to speak of "natives of India" in the lump, as if the Parsees had much in common with savage tribes like the Santhals. But Lord Herbert shall speak for himself:—

"The right," he said, "guaranteed to the Indians by the Act was a right to compete for all appointments of a certain class in India. What do the petitioners now ask? They do not ask for local appointments in India, but they ask for appointments in the general service of the Crown, and they claim to be appointed as Surgeons and Assistant-Surgeons to our line regiments stationed all over the world. I admit at once, and fully, the acquirements, the skill, the knowledge, and the high character of these gentlemen. The delicacy of their hand is recognised in operations; but it is said they are deficient in some of the most valuable qualities which characterise the Practitioners of this country. What is the business of an Army Surgeon? It is very different from that of a Civil Doctor. In the case of an Army Surgeon everything depends upon the degree of confidence which the men have in his skill. Recollect, the men have no choice; they cannot go where they like for Medical advice. A Surgeon is imposed upon them, and it is of the very first importance that he should be possessed of their confidence. For a long time in our service the Medical Profession was not much regarded, but now we have the best skill which can be found; all the best men are coming to us. What is the result? It is that the recommendations of our Army Surgeons are treated with the greatest respect by our officers, and that the men have that confidence in their skill which is so essential to the success of their services. A Doctor cannot cure a man who does not believe in him. The noble lord may say that science has neither creed nor colour. That is quite true; but we know that Englishmen have not the same confidence in an Italian or a German Doctor which they have in an English one. (Hear, hear.) When the petitioners first applied to me I consulted Dr. Gibson, who is at the head of the Army Medical Department, on the subject. He said he thought they were physically incompetent to bear, not the cold of England or the heat of any other country, but the constant vicissitudes and changes of climate to which they would be exposed in our service. I was not content with that. I thought I could not do better than take the opinion of some great authorities. Accordingly, I referred the question to three gentlemen—Dr. Gibson, Director-General of the Army Medical Department, Sir John Liddell, Director-General of the Naval Medical Department, and Sir R. Martin, a gentleman of great Indian experience. I asked them to go into the whole subject, and report to me their joint opinion whether the petitioners were physically qualified to stand the exposure to the various climates in which they would be called upon to serve were they admitted into the Medical Department of Her Majesty's army. They reported as follows:—'It is our deliberate opinion, founded on experience, that the native and mixed race of India and other tropical countries will never be able to sustain, for any length of time, the climate of our Northern regions, and that they can only be employed advantageously to the public service in climates similar to those in which their race exists.' I thought that conclusive. In the face of such an opinion I could not comply with the request of these gentlemen from India, they having no claim by Act of Parliament for admission into the general service of the Queen. But we have never questioned their right to appointments in India; on the contrary, we have urged their employment in civil, police, and, possibly, military capacities in that country."

Lord Ellenborough, with characteristic eccentricity, eulogised the Native Doctors:—

"In the Native Hospitals there was the most perfect ventilation, while in the others there was none. I visited the European Hospitals and found the patients almost suffocated with the closeness of the rooms in which they were placed. During the time I was in India I never needed the services of a Doctor, but had I done so, and placed myself under the care of an European Practitioner, the probability is that I should not now be addressing your lordships."

"An Indian Doctor" corrects this statement of Lord Ellenborough, who evidently wished his hearers to infer that the Native Hospitals were under the management of Native Doctors, whereas all Native Hospitals and Native regiments are invariably under European Doctors. He says:—

"I doubt whether at the time his lordship was in India he could have found a single Hospital under the management of a native. Any one acquainted with India must know that the recent admissions of natives into the service have not turned out so well as was expected, and that it has been found impossible to put these gentlemen in charge of European troops, so strong is the feeling of the men themselves against being under their charge."

For several years past it has been found very profitable by advertisers to make known their offers or their wants to the Medical Profession by means of the established Medical journals. At one time the advertisements on our covers consisted almost entirely of announcements of new Medical books; of the wishes of Assistants to obtain employment, or of employers to obtain Assistants; or of gentlemen who wished to purchase or dispose of their Practices. But as advertising became indispensable to success, it was found that Medical men were most favourably approached through their own journals. They read them more attentively, and keep them much longer, than the daily papers or the weekly literary journals, and the advertisements are not buried amid a great mass of others. Though numerous, they are comparatively few and select. Then it is remembered how many people apply to their Medical man for advice upon every article they

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eat, drink, or wear—what active members Medical men are of all Sick Clubs and other local Societies; and how very great is the influence they exercise upon the habits of all classes of the community. Thus books of all classes are now constantly advertised by the leading publishers; and year after year advertisers find it more and more to their advantage to address the Medical Profession in their own class journal. Hence a number of Medical journals have been started, not because they were wanted by the Profession, but because some speculative individual thought he might cover his certain losses, and obtain a profit, by the help of the advertising world. Most of these journals are now forgotten. A few months saw the end of the majority. Two or three still exist in struggling obscurity, supported solely by the faith of too-confiding men of enterprise. The history of one of these has been curiously brought to light this week, by a case in the Bloomsbury County Court, tried on the 21st inst., before Mr. Lefroy. It seems that a monthly Medical journal, called the *London Medical Review*, was started in 1860. Some of our readers may remember to have heard of it, as Dr. Wilks published a note in these columns repudiating all connexion with it beyond the publication of an article for which he was paid. The sole proprietor, as we learn from the evidence of Mr. Baillière the publisher, was a Mr. S. E. Smith, of 21, Langham-place, who is described in the "Medical Directory" as M.R.C.S. of 1858, and who is known as the advertiser of books on deafness. We trust the schedules presented to the College of Surgeons by Mr. Smith will be examined with attention by the Council, for we find him admitting in his evidence that he practised before he "took his degree," and that he was "an errand boy, a waiter, and a commercial traveller," at Birmingham. It was suggested that the term "commercial traveller" meant "hawker of spectacles," but the Judge thought the fact that Mr. Smith had risen in the world was creditable to him. He had risen to the position of Member of the College, and he was ambitious of owning a Review, and his plan seems to have been to make the advertisers gratify his ambition. He waited himself upon Mr. Huxley, the bandage maker, Mr. Atkinson, the truss maker, and others, and procured advertisements upon the promise that 20,000 copies of the first number of the Review would be circulated, a copy being sent to every member of the Medical Profession. Mr. Atkinson hearing that this promise had not been kept, refused to pay; others acted in the same way, alleging breach of contract and fraud, bringing forward evidence that only 2000, instead of the 20,000, were printed of the July number, until, in the following March, after complaints had been made, 18,000 more were printed; but, even then, although Mr Baillière sent 4000 to his agents, there was no proof of circulation. It is quite clear, therefore, that advertisers were induced to give orders by false promises, and this view being taken by the Court, the plaintiff lost his action, and had to pay the costs incurred. We direct attention thus prominently to the case, because we believe it to be by no means the only one in which advertisers are induced, by equally false representations, to support publications quite as worthless, and even more dishonest, than that of Mr. S. E. Smith, M.R.C.S., 1858.

The Registrar-General, in his weekly return for the present week, makes lamentation over the "offensive emanations from gulley-holes in the Strand,"—the danger being evidently near home,—and fears that some epidemic will arise unless the Medical Officers of Health bestir themselves to abate putrefaction in sewers and cesspools. He also suggests the use of disinfecting fluids in houses. The last recommendation is a very sensible one; and we fully believe that six pennyworth of chloride of lime, or of Condy, or MacDougall's disinfectant, or even one pennyworth of dilute sulphuric acid, used every week with abundance of water, so as to sluice out every sink, closet, and trap in or near every human habitation, would save many pounds' worth of illness. But as for the gulleys, they are necessary evils so long as the present underground sewers allow of stagnation and deposit and slow evolution of gases. If these gases do not escape from the gulleys at the sides of the road, they must from the ventilating openings in the middle, otherwise the men who enter the sewers to clean them out would meet with the fate of the poor fellows who were suffocated in the Fleet-lane sewer. We gave an account in a recent number of an old choked-up sewer running underneath houses in New Bond-street, so dilapidated that it threatened to fall in and engulph the buildings over it, and so foul that the workmen were afraid to enter it, and that it yielded pestilential gases when open for repair, which tainted meat and rendered the neighbourhood almost uninhabitable. Yet this sewer was in nobody's jurisdiction, and (as the Coroner's jury were complaisant enough to declare in the case of the Fleet-lane sewer) nobody was to blame. A very comforting doctrine for District Surveyors and Engineers, to Metropolitan or Civic Board of Works, but not to the public, who pay heavy rates, and suffer from unmitigated stenches.

We regret to have to announce the death, after a long illness, of Dr. William Kingsley, of Valley House, Roscrea, County Tipperary, the beneficent founder of the Royal Medical Benevolent Fund Society of Ireland. Dr. Kingsley, distinguished for his activity and zeal in everything relating to the honour and welfare of his Profession, has left in the noble institution just named an imperishable memorial of the benevolence and usefulness which characterised his career. He became a Licentiate of the Royal College of Surgeons in Ireland in 1817, and a Fellow in 1844. He was M.D. of St. Andrews and of the Queen's University in Ireland, and for many years enjoyed an extensive country practice. He was the author of "A Handbook for the Management of Asiatic Cholera," and of several papers published from time to time in the Medical journals.

The Irish newspapers advocate a Compulsory Vaccination Act, for the protection of the well-doing part of the people, against the pestilence liable to be brought upon them by the ignorance and improvidence of the lower orders:—

"How," it is asked, "are the poor to be induced to get their children vaccinated? They have been warned of the danger of neglect, they have got the lymph for nothing, or next to nothing: the Doctor goes almost to their doors to perform the operation: still, two thirds of the parents are so lazy, or so much occupied, that they neglect to bring their children to be vaccinated, and leave them exposed to the danger of one of the most terrible diseases that ever afflicted our race. Will moral suasion, friendly counsel, pastoral exhortation, or anything else short of coercion, ever avail to conquer this popular apathy about a matter of such vital importance? Vaccination must be made compulsory. It is so in England, and why should it not be so in Ireland? The English people may be left to themselves much more safely than the Irish. They act more independently, they are more thrifty, and they have more regard for the future. Yet even they require the coercion of law to make them get their children vaccinated. The facts which we have adduced prove that the Irish require not less the same sort of compulsion."

We must not allow the venerable Lord Chancellor Campbell to pass away from the scene without one word of respect, due to his long, honourable, and laborious life, and to the ability and equity which characterised the discharge of his official duties in the various circumstances under which

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he was brought into contact with Medicine and Medical Practitioners. On the evening before his decease, whilst entertaining a large and brilliant party, and apparently in the possession of his usual health, and more than usual spirits, he referred to the case of an old and intimate friend, who had been in a dying state for many months, and observed that in addition to the prayer against "sudden death," one against lingering death ought to be inserted in the Litany. His wish in this respect was granted; he was found dead in his chair within a few hours, owing, as is surmised, to rupture of one of the great blood-vessels.

Mr. Pepper has been lecturing on a new system of ventilation, patented by a so-called National Ventilation Company. It really consists in a nice adaptation of wire-gauze to open windows, so that the air should be allowed to steal gently in and out, while violent draughts, and those enemies to ventilation in London, the *blacks*, shall be excluded.

REVIEWS.

Elements of Medical Zoology. By A. Moquin-Tandon. Translated and Edited by Robert Thomas Hulme, M.R.C.S. 8vo. Pp. 423. London: 1861.

If young men cannot even now, by any possibility, attain the wisdom which is the privilege of old age, they are, nevertheless, expected to gather up an amount of knowledge in their years of pupilage which formerly would have made the reputation of a veteran philosopher. In olden times when a man aimed at the dignity of a sage, he began his career by turning chiffonier. He groped his way along the avenues of knowledge, picking up scraps of information as he passed along, and in mature years arrived at the goal of his ambition. His accumulated treasures were his own by right of industry, and he had the satisfaction of finding that the labour of acquisition had made them inalienable, except by the loss of his natural powers. Now the system is altered. Our youth are trained as mental acrobats. Their business is to prove to successive Courts of Examiners that, at a certain age, they can balance a certain amount of so-called useful information upon the points of their memories. The training required for the exploits is severe and successful in its way. An ancient would be astonished at some of the commonest *tours de force*. Our young Blondins do stilt over the artificial Niagaras we construct for them. But, of course, we are obliged to help them in the work of preparation. They cannot spare time to grope in gutters and dust-heaps at early dawn. We fit up repositories for them where they can find all they want ready to their hands. Scientific and literary outfitters equip them at the shortest notice. They can have the choice of guide-books, elements, compendiums, or manuals, and all the advantages of competitive lecturing in rival schools, at absurdly low fees, and of a monopoly of grinding power for a more reasonably proportionate payment, which they are only too glad to make. Every subject is systematised and epitomised for them. They have nothing more to do than to cram, attitudinize, and keep steady till the examinations are over, and they can change the crude burden of scientific rubbish for the compliments and decorations of the diploma. *Doctissimi, ornatissimi*, in a few weeks time they feel as empty as inverted hydras, and the work of real education begins. The business of the Medical Practitioner is with actual man, who in his relations to things around him is the most polygonal of all creatures. Organic and inorganic agents press upon him at all points. His life is better or worse, longer or shorter, according to the status he maintains among them; and not being able to do this satisfactorily by his own skill, he trusts himself to the care of a craft or caste who are supposed to know all things *quæ prosunt omnibus*. The beasts of the field, the fowls of the air, the creatures that live in the sea, things creeping innumerable, are either his friends or foes from the cradle to the grave. Some he eats, some feed upon him, some cure his diseases, some kill him, some to him are beasts of burden, others make the journey of life with him, either as inside or outside passengers. These things are all known and written about; and big and many are the books that contain what is known. We all remember the size of the elements of Materia Medica,—dispensatories are as deep and dismal as coal mines,—German industry furnishes double-volumed treatises on parasites, which are reproduced with all the irresponsibility of a committee, and all the subscribing means of a Publishing Society, and as for "Systems of Nature," who can compass them? But unfortunate students must show something that glitters like gold from all these diggings, and how are they to wash out for themselves the granules that will pass the test? Hence we get considerate authors moulding out a series of sectional groupings within the boundaries of the great natural classifications. Medical zoology shapes itself into a book. Mons. A. Moquin Tandon, Professor of Medical Natural History to the Faculty of Medicine at Paris, gives himself up to the task, principally "for the use of those who are intended for the profession of Medicine or the practice of pharmacy," that is, for doctors and apothecaries; and our friend and countryman Mr. Hulme thinks that "in a country like England, possessing numerous colonies, scattered, etc., and young practitioners, etc., destined to careers of responsibility and usefulness," a book like M. Moquin Tandon's must be of considerable value. And so it is. The book is good, and the translation is better. M. M. Tandon saw two errors in his way, and he has avoided them. As students either are or should be Bachelors of Science, and, therefore, either do or ought to possess a general knowledge of the structure and classification of the animal kingdom, he has omitted the details of either Comparative Anatomy or of Zoology. He also saw that it would be wrong to describe at great length the parts of animals, or their products, which are employed in Medicine, and thus he steers clear of the profundities of the Analytical Chemists and the *omnium gatherum* propensities of Anthony Todd Thomson and his followers. Mr. Hulme is an Englishman, translating or editing for Englishmen, and wisely nationalises the book. The matter which concerns only the French bachelors is left out, and replaced with something more interesting to English students; but, as an editor should justly do, he uniformly indicates his insertions by brackets.

The arrangement of the book is founded upon the characters of the animal or its Medico-Zoological relations. This is a plan more practical than scientific. But it has its advantages, and, according to the author, prevents the undue subordination of Medical Zoology to Zoology proper. A writer, for example, arranging his chapters after the plan of the "Animal Kingdom" of Cuvier, will be compelled to speak of the Quadrumana and Lepidoptera. But what Doctor, except John Hunter when he was forming his Museum, has anything to do with monkeys? And as for butterflies, it is utterly impossible to make any profitable use of them. So it is better to stick to the flies that make the ointment stink and pay, and thus subordinate Zoology proper to the wants of the Profession. Part the first of the book comprises the natural history of man, and has chapters on the character of man, the anatomy of man, on a supposed wild man, on the unity of the human species, on the races of man, and on the human kingdom. If it were not for the opening sentence which disarms criticism, we should object to all this; but after reading, in a distinct line appropriated to the enunciation, that

"Man is the chief of living beings,"

how can we be captious, especially when the rest of what is said about him, is said with a condensed comprehensiveness that almost rivals the Mosaic anthropology.

After this forgivable exordium, we come in earnest to the subject of Medical Zoology proper, and an abundant mass of very useful matter, admirably sifted, and exactly in the shape that the student and practitioner want it, is distributed under the five following heads:—1st. Animals and the actual products employed in Medicine. 2nd. Noxious animals, but which are not poisonous nor yet parasites. 3rd. Poisonous animals. 4th. External parasites, or epizoa. 5th. Internal parasites, or entozoa. One hundred and twenty-four woodcuts well illustrate the various subjects. As may be supposed from the character of the book, it would be scarcely fair to subject it to the test of making extracts; but, taking one of the sections as a sample of the rest, we find a fuller history of the sarcoptus, or itch insect, than can be seen elsewhere, tracing notices of it to Ambrose Paré,

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Rabelais and Avenzoa, and giving the story of its scientific pursuit by Messieurs Galès, Mauronval, Renucci, Raspail, Leroy, Vandenkeck, Bourguignon and Lanquetin. The personal description and account of its habits and habitat are quite up to the mark of the history, and we can only say that those who are not satisfied, and want to know more about the creature than is to be learnt from this book, had better make its acquaintance and observe for themselves. For our part, we are content with what is before us. M. Moquin Tandon is indisputably a good Professor of Medical Natural History. His book is a good book on Medical Zoology, and Mr. Hulme has proved himself the good editor of a good book.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

SWITZERLAND.

BERNE, May 28.

THE MEDICAL FACULTY.

YOUR Würzburg correspondent has anticipated me in communicating to you that, in accordance with the unanimous proposal of the Medical Faculty, Dr. Biermer was lately appointed Professor of Clinical Medicine, and lecturer on special pathology and therapeutics at this University, by the Government and the authorities of the Hospital. Owing to the retarded decision of this matter, a number of students have transmigrated to foreign Universities; nevertheless, Professor Biermer opened, on the 23rd inst., his clinical demonstrations before a numerous audience. After a few appropriate words to greet this his now adopted country and the circle of his new pupils, he gave a concise and clear exposition of his views on Clinical Medicine. His scientific faith is that of the modern physiological school, which advances the principle that disease is nothing foreign nor peculiar which ought to be studied apart for itself, but that the same unalterable laws of physiology also hold good for pathology, and that it is only the conditions under which they appear that are changed; to find these out and to render them as perspicuous as possible, should be our task. Every case of disease may be considered as a physiological experiment instituted for us by Nature, the conditions of which are of course much more complicated than those arbitrarily put by ourselves in our experiments. The Professor then drew attention to the importance of pathological anatomy which confirmed or corrected the diagnosis made, and proceeded to explain the great consequence it was to the Physician, to be able to form an accurate prognosis, on which his reputation in private practice often depended. Concerning ætiology, he remarked that, although it had made considerable progress within the last decennia, owing to our more extended anatomical and physiological knowledge of the human body, and by a critical consideration of the facts within our reach, still, in a large majority of cases we are left very much in the dark in this respect, and that experimental pathology only would enable us to clear up this subject satisfactorily. As to therapeutics, the Physician would be in a very precarious condition if he confined himself to the employment of such remedies only, the mode of action of which can be physiologically explained; and while waiting for a scientific future of therapeutics, we were obliged to treat patients according to the empirical facts in our possession. Cases occurred every day in which remedies which, according to physiological premises, ought to cure a patient, were of no avail, while other means would effect this end, although we were not able to say how it was done. The Professor said that, in the treatment of disease, we ought to keep aloof equally from polypharmacy and from nihilism; and then proceeded to a consideration of the methods of clinical examination now practised. It was much more important and instructive to make a comprehensive and accurate analysis of a single case, than to glance cursorily, however ingeniously, over a considerable number of diseases. He then went *in medias res*, and introduced an interesting case of pneumothorax, where he had the opportunity of showing the practical application of the principles he had just enounced, and showed himself a perfect master of his subject. He gave, amongst others, some interesting details of his own researches on pneumothorax, and dwelt upon the differences in the pitch of the metallic percussion sound during inspiration and expiration, and when the patient is sitting up or laying down, to which he had first drawn attention, and which are of importance for distinguishing pneumothorax from vomicæ, in which metallic phenomena of auscultation and percussion are also present. The wards of Professor Biermer contain a great variety of cases, and certainly there can be no doubt that the Professorship of Clinical Medicine at our University is now in the best hands.

THE MEDICO-CHIRURGICAL SOCIETY.

On the 22nd inst. a well attended meeting of the Medico-Chirurgical Society of this canton took place here. Perhaps a few remarks on the origin and progress of this Association may be of interest to your readers. It was founded in 1803 by some earnest workers in the science of Medicine, in order to become better acquainted with one another, to exchange experiences made, and to further science by mutual efforts to the best of their ability, to uphold the honour of the Medical Profession, and to improve the sanitary condition of the public. The Society meets two or three times every year. In 1803 it numbered 47 members, which have now increased to 84. The meetings have always been regularly held, with the exception of the years of the last French war (1813-15) and during the famine of 1817 and '18. Formerly this city was the permanent seat of the Council of the Society, but it now changes every two years, and other towns, as Briel, Burgedorf, Thun, etc. also enjoy successively the honour of being the temporary head-quarters of the Society, a circumstance which greatly enhances the interest taken in the welfare of the Society by the provincial members.

CRETINISM AND M. GUGGENBÜHL.

The last meeting of this Association was interesting on account of a discussion on Cretinism, which, of course frequently occupies the attention of Medical men in this country, but which is still as open and vexed as ever. The subject is so much the more important to us, as there exists in our immediate neighbourhood the famous institution of the Abendberg, which was, by its founder, Guggenbühl, vaunted to the world as the chief and most successful colony for the education of cretins. Even now the false halo surrounding this institution is not quite destroyed, in spite of the strong anathemata thrown upon it by the Medical Profession of Switzerland and the local authorities. Guggenbühl at present is travelling in Russia, where, perhaps, his real character is still unrecognised. I should not have mentioned his name at all, if he had not recently sent a memoir to the French Academy, in which the views until now prevailing as to the origin and causes of Cretinism are given, and the proposition made to draw up a statistical account of the condition of all the cretins to be found in Europe.

But to return to the discussion which took place on this subject in the Medico-Chirurgical Society. The Pathological Anatomy of Cretinism was first gone into. One of the speakers endeavoured to prove from the examination of a large number of skulls in the Museum of our University, that the doctrine advanced by M. Virchow, of premature synostoses being the cause of cretinism, was not sufficient to explain all the peculiarities found in cretins, and must certainly suffer many exceptions. He denied the importance of the development of the base of the skull for the physiognomy of the cretins, and said that the cause of the disease was probably an intra-uterine hydrocephalus, originally caused by scrofula, and which was further developed soon after birth.

TAR, TRACHEOSTENOSIS, CÆSAREAN SECTION.

Disinfectants was another subject discussed. Of the several preparations of tar, that of saponine was generally pronounced to be the best of them. Dr. Demme, of this city, has seen a number of cases of ozæna, in which the touching the mucous membrane with, and the injection of, this substance into the nose give the best results. Afterwards a paper was read on tracheostenosis caused by substernal and subclavicular cysts of the thyroid body; preparations showing this condition being exhibited at the same time. Finally, a communication of a case in which Cæsarean section had been successfully performed was given. The meeting was concluded by a dinner, where the utmost cordiality prevailed. The next meeting will be held in autumn, either at Interlaken or at Thun.

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THE ARMY MEDICAL DEPARTMENT.

I promised you in my last letter to give you some information concerning the Army Medical Department of this canton. In Switzerland every Doctor is, *so ipso*, after he has received the licence to practise, draughted in a regiment, to which he is obliged to give his care. As there is no special institute for Military Medicine and Surgery, so-called "sanitary courses" are given for the instruction of Medical men in their special duties; but as this subject is somewhat lengthy, I purpose giving you a description of a "sanitary course"—a name probably very puzzling to your readers—in my next communication.

SCOTLAND.

EDINBURGH, 1861.

"FROM broken visions of perturbed rest
I wake"

to the consciousness that I have not written to the *Medical Times and Gazette* for a very long time. "So I take up my pen," as the saying is, to let your readers know that we are in a very flourishing condition here in Edinburgh. We are, it is true, lapsing into the delicious indolence of summer, but though the Academical year has still to drag six weeks of its heavy length along, we feel ourselves equal to it. The Societies have closed for the season; the Medico-Chirurgical finished with a good paper by Warburton Begbie, on Ichthyosis, and a valuable contribution from Dr. McKidd, of Elgin, on the Virtues of Ipecacuanha in Chronic Dysentery. The meetings of this Society have not been numerously attended during last year; many of the seniors staying away, some say from aversion to the loquacity of their juniors (I believe myself post-prandial inertia is the cause); another reason may be that the Society has not yet recovered from the reaction that followed the vituperative meetings which discussed some time ago the theories of inflammation and its treatment. An amusing scene occurred at one of these; after some severe pummelling of each other by the best speakers, an elderly gentleman rose in a darkish corner, —"*He* had not given up bleeding by any means, far from it; he had recently been called to a patient a few miles out of town, and found her suffering from symptoms of pneumonia; he bled her at once to a couple of pints (Sensation)—next day he abstracted three more—(Expressions of disapproval from some students of the Institutes of Medicine). She made a rapid recovery." Everyone looked aghast; here had they been wasting time over ounces, while others bled into pint stoups. The speaker, however, happened to be an eminent Veterinarian, and the *she* was a cow. The meeting "in smiles dissolved away," which made a pleasant change.

In addition to the usual class of patients in his wards, Professor Syme has recently had two of the rarest surgical cases, as well as the most illustrative of the treatment of aneurismal disease, that perhaps have ever occurred in one man's practice in such a short space of time. The first, a true gluteal aneurism, was treated by the Hunterian method, and the internal iliac artery tied. This difficult operation was performed by the Clinical Professor apparently with the greatest ease, and scarcely any bleeding. The incision was long, and in the usual direction; the peritoneum was held aside with bent retractors. To be sure the parts being healthy, the man not very fat, and his being under chloroform, were great advantages; but there were still left plenty of opportunities, which a less cool hand would perhaps have taken advantage of to get into a mess.

This patient, who has gone on most favourably, had only been about three weeks in bed when a man with a large *false* gluteal aneurism came in. Mr. Syme cut into this tumour, and tied the vessel close to its exit from the pelvis, which has not been done, so far as I know, in the Edinburgh Infirmary since John Bell tied the gluteal of the leech-catcher; and, though the history of this last case is not likely to be described in such sounding periods, few who were present will again think Bell's famous description an exaggeration of the difficulties or dangers of the operation, though they were coolly, quietly, and quickly overcome.

The staff of the Infirmary has, by the ruthless hand of Time, lost the valuable services of Dr. Keiller, whose period of service lately expired. This gentleman had shown such skill in the operations required by the surgical diseases of women that his ward became at last almost constantly occupied by that class of cases. The managers of the Infirmary, recognising their importance, have decided upon its being devoted to them for the future, and have appointed Dr. Matthews Duncan to take charge of it, who will, no doubt, "carry on the business" to every one's satisfaction, though there was at first a good deal of surprise and some disappointment expressed at Dr. Keiller not being re-appointed. But the fairness of giving each man his turn is too obvious to be long disputed.

Talking of the Surgical diseases of women, how is it that the Obstetric Surgeons obtain union by the first intention in the sloppy tissues they have to deal with? Professor Simpson stitches up one vesico vaginal fistula after another. He has, I believe, closed seventeen or eighteen cases in succession, and each by one operation. Why! Simple hare lips are not more certain, and yet not very long ago one successful case would have been not only considered a Surgical triumph, but an extraordinary rarity. Dr. Simpson lectured at a *conversazione* given by the President and Fellows of the Royal College of Surgeons the other day, to a large audience. His discourse was as usual a word picture, the serious parts and heavy statistics brightened up by anecdote, figures in the fore ground, subtle models, curious devices for combining accuracy with brevity of description. The feeling a non-obstetrical man has on such occasions, is that, if coming into the world be so difficult, he deserves great credit for having succeeded in the attempt, and thus the *amour propre* of each guest is gratified. This meeting was a great success and excellently managed.

The Doctors had a meeting the other day anent the forms necessary for confining lunatics, and whether dipso-maniacs should be locked up. Dr. Alexander Wood, who presided, made a good and impressive speech, so did Dr. W. T. Gairdner; indeed, all the speeches were good, and to the point. It seems the Sheriff's warrant or endorsement to the Medical certificate which is necessary here, is a mere tiresome farce, and painful to the poor maniac's relatives. The object our Doctors have in view is to substitute some more handy and less offensive protection for the patient; not, as many seem to imagine, to obtain the power of locking any one up on their own responsibility. The question of confining drunkards is a very delicate one, and I propose that the Sheriff's warrant should be specially retained for their benefit; for who approaches so nearly to a criminal as the man who, by self-indulgence, destroys himself and robs his relations of their good name, not to mention disgracing future English dictionaries by such words as dipsomania, anamethysia, etc., invented, forsooth, for his special benefit.

It seems rather cruel, however, to punish by law what is allowed by law. Dr. Christison alludes in his excellent pamphlet, lately published, to one establishment where "spirits rather stronger than Government alcohol spout direct from the still, in a fountain of the diameter of one's leg; and a single Scotch distillery is said to be capable of paying the 100th part of the whole revenue of Great Britain." (Page 45.) This ample supply is subdivided into innumerable baits, and distributed to hundreds of traps throughout North Britain—licensed traps kept by smug bailies, who lock up persons who are disorderly after being in but escaping from them, and unlicensed traps into which old hands who try to keep up appearances sneak, and young hands too, alas! which are made shaky and useless therein. The worst of the teetotallers is that they drive the drinkers into holes and corners whence they are some day dragged —poor, blear-eyed, winking owls, into light, perhaps from some secluded country parish, to give the teetotal orators of the church courts an opportunity for indulgence in *their* pet stimulant, public speaking.

The best and most hopeful remedy, however, I believe, owing too in a great measure to these same Nephalists, and to one especially whom you reviewed rather severely of late, is a feeling daily growing stronger against the ancient custom of drinking large quantities of a mawkish hot beverage called "toddy," which no man likes at first any more than a first cigar; which is not exhilarating, is very unwholesome as an habitual drink, does not promote conversation, but does promote a desire for some of the spirits *plain*, and for several other things better left alone.

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I should much like to see some capitalist invest his money in establishing a set of chambers near our noble University, with a graduated scale of rents, and a hall where a good, economical, nicely served luncheon or dinner could be obtained. It would pay well, and be a great convenience; moreover, it would spring a good many of the traps which are laid round about for the inexperienced. The real Edinburgh Medical student has too vigorous a mind to allow himself to be tempted into anything which may dull it; but still that is no reason why a good many places are suffered to flourish and abound in the way they do.

These glorious June Saturdays are turned to good account. Professor Balfour and his disciples rush off to vegetate on the distant hills; a tug steamer takes Professor Allman and his naturalists to dredge in the Frith, astonish the geese on the Bass Rock, and get the academic cobwebs blown away by the salt sea breeze. Then others, forming a graver party, go to Musselburgh with Professor Laycock, and there in a large Asylum, receive from him practical instruction in, to some minds, the most interesting, to all the most important and sad, of Medical subjects.

Each student here follows the bent of his own mind to a great extent; and from the variety of subjects taught, the facilities for teaching, and the general vigour which pervades the whole mass, both teachers and pupils, every year brings forward more young men already distinguished in some special department of science, which they have made their hobby and delight, without necessarily neglecting any other. Witness Mr. Pettigrew's Croonian Lecture on the Muscular Fibres of the Heart.

GENERAL CORRESPONDENCE.

CHLOROFORM IN DELIRIUM TREMENS.

LETTER FROM DR. DOBBIE.

[To the Editor of the Medical Times and Gazette.]

SIR,—The following report of a death occurring under the use of chloroform, you may deem of sufficient interest to give a place to in your Journal:—

Threatened Relapse in Delirium Tremens—Death under Chloroform.

J. C., aged 31, compositor. Had been ten years in London, employed on the staff of various daily newspapers; his hours of employment being from five p.m. till about four a.m. during six nights a-week.

According to his own statement, the work is very hard and trying, and a great deal of dissipation exists among the class of men so employed.

He came under my care ten days after his return from London, where he had suffered severely from an attack of delirium tremens, having been under treatment for three weeks, and from which he had just sufficiently recovered to allow of his being brought home under the charge of a relative. During the first week after his return home, he had continued to drink freely of whisky, and at the end of that time began to experience sensations which made him dread another attack.

February 26.—Complained of throbbing pain of head; an appearance like smoke before his eyes on looking steadily at any object; had not slept for three preceding nights. Pulse 100, and rather weak; tongue thickly coated with a yellow fur, and tremulous; manner slightly restless; hand tremulous; intelligence unimpaired. To have a pill containing five grains of calomel, to be followed by a black draught.

27th.—Medicine has operated well; tongue somewhat cleaner, but still much coated; has not slept at all. To repeat pill and draught, and take at bedtime ʒss. tr. digitalis, to be repeated four hours afterwards, should sleep not be procured.

28th.—Took the second dose of tr. digitalis, which was immediately vomited, along with a quantity of bilious matter; has not slept; is otherwise the same. To have a blister applied to nape of the neck, and, beginning at bedtime, to take drachm doses of tr. opii every two hours.

29th.—Seven drachms of tr. opii have been taken. Has slept at intervals; no pain of head; pulse 80, and stronger.

This state of improvement continued until the night of the same day, when a little before midnight I was informed that he was worse. I found him complaining of severe throbbing pain of the head, with inability to lie in bed. I proceeded to administer chloroform, with the object of inducing anæsthesia, in the hope that natural sleep might supervene. For this purpose I poured from a drachm to a drachm and a half of chloroform into a handkerchief, folded it into a cup shape, and proceeded to administer it, slowly and cautiously, as I been in the frequent habit of doing during the past eight years. For two or three minutes he did not come much under the influence of the drug, inhaling it, however, readily enough. He then had illusions such as are common in delirium tremens, and exerted himself violently, raising himself from the pillow, in spite of the force used to restrain him, in order to get rid of a figure wanting to take away his boots. This violent exertion, which is very frequently witnessed during the administration of chloroform, and usually just precedes its full effect, continued for about two minutes; and while it yet lasted, after assuring myself by smelling it, that the chloroform on the handkerchief was nearly evaporated, I poured a further quantity upon it, from ʒss. to ʒj., and continued to hold it over the mouth and nose, but so that it did not touch the face. After several inspirations, impregnated with this renewed supply, he fell back upon the pillow, when I saw that respiration was impeded. I immediately put aside the handkerchief, and firmly compressed the chest, after which a deep inspiration was drawn, and I thought the danger past.

Respiration, however, did not continue. I attempted to excite it by compression of the chest, holding the mouth open, pulling forward the tongue with forceps, dashing cold water over the head and face, and rolling the body on to the side, but with no avail. After the one deep breath there was a second sighing inspiration, and then another fainter, and at a longer interval, and then all was still. Our efforts were continued for fully twenty minutes and only desisted from when their hopelessness was evident. A post-mortem was refused.

I have very little to add to the detail of the case, and having been deprived of the opportunity of examining the body, can only surmise as to the cause of death, although it is perfectly possible that such examination might not have thrown any light on the subject. I think it probable that as a result of the man's intemperate habits, extending over a course of years, some organic change might exist within the cranium, such as softening or commencing effusion.

I do not believe the digitalis had anything to do with the fatal result, seeing that the pulse on the morning of the day of his death, and immediately before the use of the chloroform, was better than it had been previously.

The muscular exertion undergone during the administration of the chloroform I look upon as an important element of the cause of death: for while it lasted the walls of the thorax and abdomen, as well as the diaphragm, were firmly fixed, and every muscle, especially of the upper extremities, violently contracted, so that the volume of blood passing through the vessels was thereby diminished, and thrown back upon the heart, to impede further its already weakened action.

I am, &c.

ROBERT DOBBIE, M.D.

OPIUM IN PUERPERAL CONVULSIONS.

LETTER FROM MR. WITTEN.

[To the Editor of the Medical Times and Gazette.]

SIR,—The following case may interest your readers:—

M. C., aged 21 years, primipara, menstruated last in May; has desponded a good deal lately, otherwise her health has been good. She was attacked with dull, heavy, frontal headache on February 11, which continued for twelve hours. She retired to rest at 11 p.m. on the same day, and was awoke at 1 a.m. by sensations of fullness about the epigastrium, followed by copious bilious vomiting, and at 2.30 a.m. suffered from a convulsive attack, which lasted about five minutes. Soon after, nervous paroxysms and loss of consciousness supervened. She was attacked by another fit twenty minutes after, lasting from ten to fifteen minutes, in which her tongue was protruded and severely bitten. I saw

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her at 3.45 a.m., and found her quite unconscious. At 4 a.m. another attack came on, which lasted sixteen minutes: the tongue was protruded, and blood flowed from the mouth from the previous injury to the tongue. The pupils were contracted, the eyes fixed; the arms were rigid by violent muscular contractions of the extensors; the fingers and thumbs drawn into the palms of the hands. The pulse was 120, full and soft; the breathing stertorous. On examination per vaginam, the os uteri was rigid, and dilated to the size of a sixpence, the head presenting and pressing directly upon it. I administered an enema of ʒij. of gruel, with ɱlxxx. of tinct. opii. Ten minutes afterwards another attack came on, almost as violent as the preceding one, but not lasting so long; after which she remained unconscious for ten and a-half hours without another attack, and at 3.30 p.m. was sufficiently conscious to protrude her tongue when asked, and drink a cup of beef-tea. Her pulse was then 104, not so full, and easily compressible; the skin was acting freely, and she had passed water which contained a small amount of albumen. From 11 p.m. of the same day labour began to progress, which continued slowly, but naturally, till 6.30 p.m. the following day, when she was delivered of a full-grown male child, still-born. By the use of saline aperients, she soon lost her headache, and made a good recovery.

I am, &c.

E. W. Witten, M.R.C.S.E., L.M.

St. John-street-road.

REPORTS OF SOCIETIES.

EPIDEMIOLOGICAL SOCIETY.

Monday, June 3, 1861.

Dr. Milroy in the Chair.

Dr. McWilliam read a note from

DR. LIVINGSTONE ON FEVER IN THE ZAMBESI,

transmitted to him by Captain Washington, R.N., F.R.S., Hydrographer to the Admiralty:—In the typical cases given in Dr. McWilliam's "Medical History of the Niger Expedition," the gall-bladder was found distended with black bile, and if my memory does not deceive me, most of the cases treated with quinine at an early period of the disease, either recovered or were subjected to the milder or intermittent form of fever. In 1850 I adopted the plan of giving quinine, mixed with a purgative, as the first step of the treatment, and was successful in the cases of two of my own children, and an English party whom we found at Lake Ngami, and of whom one had died before our arrival. I have lost the notes of my reason for adopting the practice, but I have been successful in every case I have met with since. The prescription employed is resin of jalap, calomel, of each eight grains, quinine c. rhubarb, of each four grains, mix well together, and when required make into pills, with spirit of cardamom. Dose from ten to twenty grains. The violent headache, pains in the back, etc., all are relieved in from four to six hours, and with the operation of the medicine there is an enormous discharge of black bile; the patient frequently calls it blood. If the operation is delayed, a dessert-spoonful of salts promotes the action. Quinine is then given till the ears ring, etc. We have tried to substitute other purgatives instead of resin of jalap, and calomel; but experiments have only produced the conviction that aught else is mere trifling. No strength is lost in our march up the river of 600 miles on foot. An European would be stricken down in one day, and the next after the operation of the remedy would resume his march on foot. In some very severe attacks it was necessary for the patient to travel on a donkey, but after two or three days he would prefer to tramp it. We tried Warburg's tincture, which has a great reputation in India, but it causes profuse sweating and does not cure the disease: the strength is also impaired. We had a good supply, by the kindness of one of our nobility, but I am compelled to say that it did not answer our expectations. The daily use of quinine is no preventive. We have seen many cases occur when the person was on the verge of cinchonism. I employed the foregoing remedy with success on the west coast, but made no fuss about it more than make a general statement in the "Missionary Travels." I was not quite sure that our fever was identical with that Dr. McWilliam encountered in the Niger, but the melancholy fate of a party of six missionaries at Linyanti, where six out of nine Europeans and four native attendants perished in the short space of three months, makes me fear that it is the same complaint as that which destroyed the officers of Commodore Owen in the Zambesi, those of Captain Tuckey in the Congo, and the crews of the great Niger Expedition in that river. My companions, Dr. Kirk and Mr. C. Livingstone, entertain the same idea of the value of our pills as I do. We wrote a paper for one of the Medical Journals, but the above sad case makes us anxious that the remedy should become more extensively known than it has been, and I do not know a better plan for effecting this than by communicating it to Dr. McWilliam. Those who may try the remedy will do well to remember that the above doses are for strong adults. I cured myself and native companions in this way during may long journeys between 1852 and 1856, and that the remedy has no bad effects on the system, may be inferred from the fact that I have had no regular attack of fever since my return. I have had little illnesses, probably from exposure to malaria in its most intense forms, but nothing like what I formerly experienced; and I am of opinion that what we were all taught, not to give quinine till we had used the preliminary measure of relieving the bowels, was a mistake. [Query: Might the remedy not be applied to some of the fevers at home that arise in unhealthy localities?] Around every village in this country there is a large collection of human ordure during the dry season. This is swept into the rivers by the heavy rains, and you may guess the effect from hundreds of thousands of villages. The natives here do not drink water as the natives do on the banks of the Thames, but make holes in the sand to draw from. Possibly this has as much to do with the origin of fever as it has at home.

Tette, November 28, 1860. David Livingstone.

I give a specimen of the difference between dry and wet bulb. Victoria Falls, September 24, 1860.

	Air. Degs.	Wet bulb. Degs.	Difference. Degs.
In shade at 9 a.m.	87	59	28
,, 12 m.	96·5	63	33·5
,, 3 p.m.	96	60	36, once it was 40.

The greatest difference Dr. J. O. McWilliam observes was, I believe, 16°; generally it was 6° or 7°. D. L.

[The temperature of the dew point in the three observations respectively is, according to the formula of Glaisher, 42°, 50·2°, and 54°.—J. O. McW.]

Dr. McWilliam observed that anything coming from Dr. Livingstone was sure to command attention and interest, and that he, therefore, had great satisfaction in bringing his brief communication before the Society. He (Dr. McWilliam) had not been in any of the rivers on the east coast; but he had treated fever off the coast of Mozambique, which he found of a much more tractable nature than that which he had encountered on the west coast, more especially on the Niger. But from what he had learnt from the traders at Mozambique, he feared that the rivers on the east coast were not much less inimical to European life than those of the west coast. The Zambesi was about 25° south of the Niger, but there seemed to be no defect of that important agent in the causation of fever—heat—in the Zambesi, according to the day's meteorological observations which Dr. Livingstone had appended to his paper. The difference between the temperature of the dry and wet bulb thermometers was far beyond anything he had met with in the Niger, and was indicative of unwonted dryness of the atmosphere in the Zambesi. With regard to the treatment so successfully employed by Dr. Livingstone, the principle was of course not new, although he was not aware that the precise formula of that eminent traveller had hitherto been used; and as other purgatives than jalap, calomel, and rhubarb in combination with quinine had failed in Dr. Livingstone's travels, it was desirable that the prescription which he recommended should have further trial. To this end he (Dr. McWilliam) would endeavour to give it all possible publicity. Dr. Livingstone had alluded to the mortality in other African expeditions, and it might not be uninteresting to the Society that he (Dr. McWilliam) should briefly recapitulate the losses sustained in the expedi-

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tions to the Congo in 1816; to the Zambesi, from Captain Owen's ship, in 1823; to the Niger, under Laird, Lander, and Oldfield, in 1832; and to the Niger, under Captain Trotter, in 1841-42. He should also state the mortality in the *Eclair* in 1845, and, although not in chronological order, the dreadful loss sustained by two detachments of soldiery at the Gambia in 1825.

TUCKEY'S EXPEDITION TO THE CONGO IN 1816.

Captain Tuckey, of H.M.S. *Congo*, entered the river Congo, on the south-west coast of Africa, in lat. 6° south, on July 6, 1816. His crew at this time consisted of

Officers	7	
Naturalists, etc.	5	
Petty officers, seamen, and marines	40	52
Natives of the Congo		2
Total		54

After pursuing the voyage for some way up the river, a party of 30 proceeded on a land expedition beyond the cataracts of the river. Of this party 14 died of fever and 4 died on board the *Congo*, all within the space of three months. One man also died from the effects of river fever after leaving the river. Total loss, 19.

Of 7 officers	3 died
Of 5 naturalists	4 ,,
Of 40 petty officers, seamen, and marines	12 ,,

Mr. McKerrow, the Medical Officer, describes the weather as pleasant, the thermometer seldom exceeding 76°, or being lower than 60° Fahr., with scarcely any rain, and the atmosphere dry. He describes the fever as an intense remittent, with, however, black vomit in some cases. Bleeding—contrary to the accounts of the missions to the Congo, by Carli, Merolla, and others—was unsuccessful as a remedy. Cathartics were useful; and calomel, given so as to affect the constitution rapidly, was of great service, followed by wine and bark.

The expedition from Captain Owen's ship up the Zambesi, referred to by Dr. Livingstone, consisted of Lieutenant Brown, Mr. Forbes, midshipman, and Mr. Kilpatrick, Assistant-Surgeon, and two black servants. They left Quilimane on July 23, 1823. On August 3, being then in the Zambesi, Mr. Forbes was taken with fever, and died on the 15th. On August 27 Lieutenant Brown was seized, and died on September 5. Mr. Kilpatrick was attacked on September 1, and was likely to recover, but some imprudence caused a relapse, which proved fatal to him on October 28. The blacks got out of the river safe.

EXPEDITION TO THE NIGER IN 1832.

In the expedition to the Niger in the *Quorra* and the *Alburkah*, steam vessels, under McGregor Laird, Lander, and Oldfield, there were in the first-named vessel, besides Kroomen engaged on the coast, a crew of twenty-six persons, while the *Alburkah's* crew consisted of fourteeen only. After some delay at Sierra Leone and Cape Coast, both vessels entered the Nun branch of the Niger on October 18, 1832. The captain and engineer of the *Quorra* died immediately after the vessel arrived in the river. The boatswain of the *Alburkah* also sank under fever at the same time. On November 12, when the vessels were at Damagu some way above the Delta, many in both vessels were laid down with fever, and on the 15th one European only in the *Quorra* was fit for duty. On November 21 the *Quorra* had lost thirteen, and the *Alburkah* two men. On December 5 there remained alive in the *Quorra* four persons only, including Mr. Laird. Mr. Laird, after various relapses in his own person and the loss of others of his crew descended the Niger and reached the sea on August 19, 1833. The *Alburkah* returned to the mouth of the river in November of the same year.

The total deaths in the *Quorra* were	24	
,, survivors ,, ,,	5	
		29
The total deaths in the *Alburkah* were	15	
,, survivors ,, ,,	4	
		19

Besides these, eight or nine Kroomen died from poison. The chief part of this mortality occurred within three months after the vessels began to ascend the river. Owing to the death of Dr. Briggs at an early period of the Expedition, we have no account of his treatment on board the *Quorra*, but Mr. McGregor Laird informs us that Lander bled and blistered the sick, and gave emetics and purgatives at the outset of the disease. Blisters to the head appeared to do good in some cases, as in Mr. Laird's own case. Mr. Oldfield administered purgatives, shaved the head, and applied cold lotions. He also used mercury until slight ptyalism was produced.

EXPEDITION TO THE NIGER IN 1841—2.

In the Expedition of 1841 to the Niger, consisting of the iron steam-vessels *Albert*, *Wilberforce*, and *Soudan*, under the command of Captain Trotter, the vessels entered the Nun branch of the Niger on August 13, 1841, and commenced the ascent of the river on the 19th. At this time the strength of the Expedition was as follows:—

	Officers, seamen, and marines.	Men of colour of various nations entered in England.	Blacks entered on the coast.
Albert	62	15	76
Wilberforce	56	7	39
Soudan	27	3	18
	145	25	133

The expedition was at Ibu, below the apex of the Delta, and upwards of 100 miles from the sea, on August 26; and at Iddah, the capital of Eggarah (where rock of ferruginous sandstone, was first seen), on September 2. Fever broke out in the *Albert*, and almost simultaneously in the other vessels, on September 4, and ceased not till it had paralysed the whole Expedition. On September 10, notwithstanding the persistence of the disease, the Expedition was at the confluence of the Niger and Tchadda. Here, however, it was found necessary to despatch the *Wilberforce* and *Soudan* to the sea with their own sick, and those of the *Albert* on the 19th. The *Albert* proceeded upwards on September 21, and reached Egga, the Nufi capital, on the 28th. On October 4 there remained fit for duty, one seaman, two marines, Mr. Willie (mate), Dr. Stanger, and Dr. McWilliam. It was then determined to return to the sea, which was reached with difficulty on the 14th, and Fernando Po on the 17th of the same month.

	White Strength.	Loss.
The *Albert*, which was 64 days in the river, lost by death, in the river, at Fernando Po and Ascension, 23 persons	62	23
The *Wilberforce*, 45 days in the river, lost by death, on board and at Fernando Po, 7 persons	56	7
The *Soudan*, which was in the river 40 days, lost 10 men from fever	27	10

Of the men of colour entered in England (25), 11 were attacked with fever in the river, but none died. Of 133 blacks entered at Sierra Leone, not one was even attacked. Every precaution which human ingenuity could suggest was taken to ensure the health of this Expedition. Provisions were of the best description,—preserved meats and vegetables; and Medical comforts of every kind were supplied. The ships were ventilated upon Dr. Reid's plan; coffee was supplied to the crews early in the morning; and quinine in wine was liberally administered. The treatment consisted of purgatives, diaphoretics, and quinine; the last often early in the disease, either combined with calomel or by itself. Blisters on the nape of the neck were sometimes beneficial. General bleeding could not be tolerated.

CASE OF THE "ECLAIR" IN 1845.

The mortality on board the *Eclair* in 1845 was as follows (crew, 140):—From April 1 to June 30, off the Island of Sherboro, West Coast of Africa, several of the boats having been up the river, 10 deaths; from July 1 to August 31, at Sierra Leone, the Gambia and Boa Vista (Cape de Verde), 16 deaths; in a crew now reduced to 114 from September 1 to September 21, at Boa Vista and Madeira, 33 deaths, or at the rate of about 29 per cent. in three weeks; from September 21 to October 3, deaths between Madeira, and at the Mother-bank, and Standgate Creek, 10; total deaths, 69.

SUMMARY OF THE MORTALITY IN THE EXPEDITIONS RESPECTIVELY.

The mortality in the *Congo* in three months was 36·54 per cent.; Messrs. Lander and Laird's Expedition of 1832, in less than two months, was 81·25 per cent.; in the Expedition to the Niger in 1841-2, under Captain Trotter, nearly the whole of the mortality of which from fever, took place within

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two months, and all within four months, was 28·96 per cent.; in the *Eclair*, in six months, was 49·28 per cent. But these heavy rates of mortality are surpassed by what took place at the Gambia in 1825, where a detachment of 108 men (whites) arrived at the end of May just as the rainy season commenced. Of this number there remained alive on September 21 of the same year 21, the mortality having been within the space of four months 82·85 per cent. Another detachment of 91 men, which in the meantime had been on board of a transport at the anchorage, and which, while there did not lose a man, was landed about the end of September, and made up the number to 112. Of this number there had perished of fever 61, and of other diseases, including 6 following punishment, 12—total 73, or at the rate of 65·17 per cent. during less than three months. During this fearful mortality a detachment of from 40 to 50 black soldiers of the Second West India Regiment lost only 1 man, and had seldom any in Hospital. To go back still farther, Mungo Park on his second journey to the interior of Africa, left the Gambia on April 28, 1805, having with him, besides Mr. Anderson, Mr. Scott, and Lieutenant Martin, 34 soldiers, 4 carpenters, and 2 seamen—in all, 44 Europeans. He did not reach the Niger, at Bambakoo, until August 19, far into the rainy season, having had to traverse 500 miles of a country, fertile of disease, and beset with danger. Dysentery and fever had by this time made sad havoc among his people, for there remained alive only 11 of the whole, and on October 11 all save 4 were dead. Whether any whites, except Lieutenant Martin, survived to perish with him at Boussa some time in November, has not been ascertained. Park himself had severe dysentery, which he considered he cured himself of with mercury pushed to salivation.

The discussion was continued by Dr. Stratton, R.N., Dr. Milroy, Dr. Weber, Mr. Radcliffe, and Dr. Haward.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, MAY 2, 1861.

DR. SIEVEKING, President, in the Chair.

A Paper, by MR. JAMES R. LANE, was read, entitled,

REMARKS ON SOME DISEASES OF THE RECTUM.

Mr. LANE drew the attention of the Society to the subject of hæmorrhoidal disease, his remarks being founded upon experience obtained during a three years' connexion with St. Mark's Hospital for Diseases of the Rectum. Sub-dividing these complaints in the usual manner into external and internal, he commenced by briefly describing the nature of the two conditions, giving his views with respect to the structures involved, and an account of the leading symptoms, in each. In speaking of the treatment of swellings situated external to the anus, he said, that when they were caused by the rupture of a dilated hæmorrhoidal vein, the best and most effectual remedy was an incision, to allow the coagulum to escape; and that when they were formed by enlarged and inflamed portions of skin, excision with the knife or scissors was the only method which could be depended upon for effecting a permanent cure. He strongly condemned the use of the ligature, which, notwithstanding all that had been written on the subject, he still found to be not unfrequently employed in such cases. With respect to the curative treatment of internal hæmorrhoids—two principal methods had been practised; excision, and the ligature, to which might be added a third, viz., cauterization with nitric acid. Excision which was formerly in common use, possessed many and great advantages. The tumours could be readily, rapidly, and completely removed. The operation was attended with less pain, both at the time and subsequently, this was occasioned by the ligature; it produced less irritation, and was followed by more rapid recovery. It had, however, one very serious disadvantage, the liabilities to dangerous hæmorrhage, enhanced by the great difficulty in getting at the bleeding surface to arrest it. This danger had been felt to be so great as to outweigh all its other advantages, and had led to its almost complete abandonment in the present day, and to the substitution of the ligature in its place. In every respect, however, except in avoiding the risk of bleeding, the operation by ligature was inferior to that by excision. Such being the case, it would be admitted to be a desideratum if an operation could be devised which should combine the principal merits, and avoid the principal demerits of both. Such an operation had been devised by Mr. Salmon and had been practised by him with great success for many years, and it was principally with a view to explain its nature that he had brought the subject before the Society, as he did not think it was by any means so generally known as it deserved to be. It might be said to be a sort of compromise between excision and the ligature. It consisted of a separation of the hæmorrhoidal tumour from the subjacent parts, for about the lower three-fourths of its extent, leaving it attached by the remaining upper fourth, which was then included in a ligature. The tumours were drawn down by means of a hook with four prongs contrived for the purpose, and the division of the lower part of them was made with scissors. These structures were always supplied by vessels which descended from above, close beneath the mucous membrane, and the trunks being necessarily included when the upper part of the tumor was tied, all danger of bleeding from the divided branches was avoided. Thus the smallest possible amount of tissue was included in the ligature, and what was included was as far as possible removed from the anus. This latter circumstance he believed to be a great advantage, for the membrane an inch within the anus possessed little of that acute sensibility which characterised the integument close to that aperture. The operation being thus far completed, another point of importance was the management of the œdematous and everted collar of integument which always surrounds internal hæmorrhoids when they are protruded. The protrusion from within is necessarily accompanied by an eversion of the skin with which it is continuous, and it by no means follows that there is any superfluity of this latter tissue. To remove all this apparently superfluous skin would be followed by a greater evil than the disease itself—an immediate contraction of the anal aperture after cicatrisation had taken place. The rule which he had found it desirable to follow was to remove all irregularities and all pendulous portions of skin freely, but not to meddle with the circular fold which surrounds the protruded parts. It might be expected that inconvenience might in like manner result in the interior of the rectum from the free removal of mucous membrane, which was a necessary part of these operations; such, however, he had not found to be the case. He had, indeed, in some few cases, where the disease was extensive, seen a very decided narrowing of the lower end of the rectum for some weeks after the operation, but it had in every instance gradually subsided, and all inconvenience had disappeared. The cicatrices of the mucous membrane did not appear to have the same tendency to contract or to remain firm and rigid which was found to be the case with cicatrices of the skin. In Mr. Salmon's operations, the adoption of which he strongly recommended, he had found the subsequent pain and irritation very much lessened; and in evidence of this he mentioned that he had very rarely found it extend so as to involve the urinary organs, whereas retention of urine was, according to his experience, the rule rather than the exception after the ordinary operation with the ligature. A circumstance which he thought worthy of note was the very slight risk attending operations on the rectum if anything like care were taken in the selection and management of cases. He had during the last three years and a-half performed 166 operations for hæmorrhoids, 202 for fistula, and 97 for fissures, polypi and procidentia—465 in all; he had assisted at about an equal number in the practice of his colleague, Mr. Gowland, making a total of upwards of 900 operations, the results of which had been carefully recorded. Amongst them there had not been one instance of pyæmia, and not one instance of erysipelas; in fact, excepting in four cases, there had not been a single complication at all of a serious character or deserving of notice. These four exceptions were cases of tetanus, which occurred in the spring of 1858, within a very short period of each other. Two occurred in his own practice, and two in that of Mr. Gowland. They all followed the operation for hæmorrhoids, and all four were fatal. He thought, however, he was justified in considering them as accidental, especially as numerous deaths were occurring from tetanus in other Hospitals in London at the same period, and the disease might, therefore, fairly be said to have been epidemic at the time. In

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one Hospital which he mentioned, nine deaths had taken place from tetanus within a period of two months. It had never been noticed by others that operations on the rectum were especially liable to tetanus, and in his own subsequent experience, which extended to several hundred cases, he had seen no other example of it. Setting aside then these cases as altogether exceptional, he thought there were few operations in Surgery which afforded with so much certainty such complete and permanent relief from serious disease at so small a cost of suffering and risk. With respect to the treatment of hæmorrhoidal tumours with nitric acid, his experience did not lead him to recommend it for general adoption; but neither was he disposed to condemn it indiscriminately as some of its opponents had done. No doubt much injury might be caused, and had been caused, by its careless employment, but he had himself used it in twelve cases, and his objection to it was rather on the score of its inefficiency than on any active injury which he had found to result from it. He believed it to be well adapted for those cases in which there was an abnormally vascular condition of the mucous membrane of the rectum, without the development of large or distinct tumours which could be protruded; but under the opposite circumstances repeated applications of the acid were necessary to reduce the diseased parts to the level of the surrounding surface, and the treatment then occupied a much longer time, and was in reality much more severe and much less likely to be permanently effectual than the operation by the ligature, or that modification of it which he had recommended.

Mr. Baker Brown agreed in the main with what had fallen from the author of the paper; he could confirm his recommendation of opening freely that variety of external pile which was suddenly formed by the rupture of a hæmorrhoidal vein. The relief was instantaneous, and the danger of bleeding, none. He had tried the plan of tying internal hæmorrhoids as recommended by Mr. Lane, and although it possessed many advantages, still he had occasionally found considerable contraction of the anus after their removal. He preferred the simply dividing the skin where it joins on to the mucous membrane, before applying the ligatures, carrying out, in fact, the golden rule laid down by the late Mr. Copeland, "cut skin, tie mucous membrane." Mr. Brown always used ligatures of twine in preference to silk. With respect to the observation of the author that there was more bleeding in women than in men, Mr. Brown explained that it arose frequently from a suppressed action of the menstrual discharge, or from the cessation of that discharge at certain periods of life. Mr. Brown could confirm the statement of the author as to the safety of all operations of this kind, as he had performed a large number, amounting to many hundreds, and had never met with a single death or a case of pysemia. Mr. Brown felt quite certain that the cases of death recorded by the author from tetanus, were due to a peculiar epidemic at that time prevailing, as several cases of tetanus arose, both in London and the country from different operations. Mr. Brown considered the paper of the highest practical value, and contained all that it was desirable to know of the surgical treatment of hæmorrhoids.

The discussion was continued by Mr. Weeden Cooke, Dr. Sieveking, Dr. Hare, and Dr. Priestley.

Mr. Lane replied to the remarks made by the several speakers, and with reference to Mr. Brown's observation that he had found contraction of the anus follow the operation he had been recommending, said he believed that permanent contraction of the anus itself, always depended upon the removal of too much of the surrounding skin; and that the contraction sometimes observed just within the rectum was, in like manner, the result of removal of the mucous membrane. This latter form of contraction, however, he had always found to disappear spontaneously after a few weeks. It depended not upon the mode of removal, but upon the amount removed, which was sometimes necessarily large. It was quite as likely to follow the one operation as the other, in fact, the worst cases he had seen had been after the old operation. He did not altogether concur in Mr. Copeland's maxim, always to cut skin and tie mucous membrane; he would always cut both, were it not for the danger of bleeding, and he thought the next best thing was to cut as much as was safe, and to tie the remainder. He believed it to be sound Surgery never to remove tissue with a ligature when it could be safely done by a cutting operation.

MEDICAL NEWS.

Apothecaries' Hall. — Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise on June 20, 1861:—

Curme, Decimus, Dorchester, Dorset
Galton, John Henry, Brixton-rise
Irvine, George Richard, Portsmouth
Knaggs, Sydney Henry, Brompton
Masters, William Hooper, Yeovil, Somerset
Palmer, Henry, East Garston, Berks.

The following gentlemen also on the same day passed their First Examination:—

Grove, William Richard, Guy's Hospital
Slade, Robert, ditto
Smith, Cleveland, ditto.

APPOINTMENTS.

Peatson.—Joseph Chadwick Peatson, M.R.C.S. Eng., L.F.P.S. L.M. Glasg., has succeeded the late Mr. Daniel, as Surgeon to the Lock Hospital, Manchester.

Sylvester.—Charles Sylvester, M.D. St. Andrews, M.R.C.P. Lond., M.R.C.S. Eng., L.S.A., has been elected Physician to the Eastern Dispensary, Bath, to fill the vacancy caused by the resignation of Dr. Coates.

DEATHS.

Blackshaw.—June 20, from injuries received on being thrown from a pony-chaise driven by himself, and then run over by a brougham, John Blackshaw, of Omega House, Alpha-road, Regent's-park, M.D. Erlangen, aged 50.

Crewe.—May 25, William Poole Crewe, of Stafford House, Cookesville, Canada West, formerly of Newcastle-under-Lyme, M.D., aged 63.

Culhane.—June 20, Daniel Culhane, of Dartford, Kent, M.R.C.S. Eng., L.S.A., aged 47.

Eccles.—June 18, Edmund Eccles, of Longridge, Preston, Lancashire, M.R.C.S. Eng. (in practice prior to 1815), aged 73.

Gibb.—June 21, at Rhuebegg, Strone, Scotland, Spencer Boyd Gibb, of the 1st Royal Dragoons, M.D. Univ. Glasg., L.R.C.S. Edin., aged 29.

Gill.—June 16, Charles Frederick Roberts Gill, of Thornbury, Gloucestershire, M.D., C.M. and L.M. Glasg., aged 36.

Hue.—June 23, Clement Hue, of No. 9, Bedford-square, M.D. Oxon., F.R.C.P. Lond., aged 82. He had been Physician to St. Bartholomew's Hospital for more than forty years.

Hunter.—June 14, John Hunter, of No. 11, Hart-street, Bloomsbury-square, M.R.C.S. Eng. (in practice prior to 1815), aged 68.

Lupton.—June 18, after a lingering illness, Harry Lupton, of Thame, Oxfordshire (in practice prior to 1815), formerly Surgeon to the Depôt of Prisoners of War at Thame, aged 75.

Nash.—June 19, at Bonchurch, Isle of Wight, Frederick Nash, M.D., aged 34.

O'Reilly.—June 14, Philip C. O'Reilly, of Abbeyfeale, Co. Limerick, L.R.C.S. Irel., and L.M.

Richards.—June 20, at Oxford-terrace, Islington, Joseph Richards, late of Newcastle-street, Strand, M.R.C.S. Eng., L.S.A., aged 61.

Ross.—June 14, John Alexander Ross, of Montrose, Forfarshire, L.R.C.S. Edin.

Shepherd.—June 16, of typhus fever, at the South Dispensary, Upper Parliament-street, Liverpool, Samuel Smith Shepherd, L.R.C.P. Edin., M.R.C.S. Eng., aged 29.

Association of Medical Officers of Asylums and Hospitals for the Insane.—The National Association for the Promotion of Social Science having fixed their annual meeting this year at Dublin, from the 14th to the 21st of August, the President and Committee of the Association of Medical Officers of Asylums and Hospitals for the Insane have determined to hold the annual meeting of the Association during this period. The meeting will, therefore, be held on Thursday, the 15th of August, at Reynolds' Hotel, at one o'clock. The retiring President, Dr. Bucknill, will resign the chair to the President Elect, Dr. Lalor, who will deliver an address to the Association. In accordance with the unanimously expressed opinion of the members, the President and Committee recommend that the annual meeting for 1862 (being the Great Exhibition year) be held in London in July.

Death of Charles Lever.—Charles Lever, the distinguished Irish novelist, died at Spezzia a few weeks ago. Mr. Lever was born in Dublin, in 1806. Having been at an early age destined for the Medical Profession, he studied with that view, first in his native country, and afterwards in France. When cholera for the first time made its appearance in Ireland, Lever was selected as Medical Officer of a district in the North, comprehending the city of Londonderry and the towns of Coleraine and Newtownlimivady; and his

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practice is stated to have been wonderfully successful. He was subsequently nominated Physician to the Embassy at Brussels, and, while occupying that position, he published periodically "Harry Lorrequer," which, on its completion, he dedicated to Sir G. Hamilton Seymour, then Envoy at the Belgian Court. While engaged in the production of his numerous works of fiction, he, in 1842, took up his residence in the neighbourhood of his native city, and figured for a time as editor of the *Dublin University Magazine*. For many years past he has resided with his family at Florence and in other parts of Italy, but has not practised Medicine, his literary gains having been very considerable.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following Bye-Laws were finally enacted at the Comitia Majora held on Tuesday, June 25:—"Any candidate who has already obtained the degree of Doctor or Bachelor in Medicine at an University, after a course of study and an examination satisfactory to the examiners appointed by the College, shall be exempt from all parts of the examinations hereinbefore described, except such as relate to the principles and practice of Medicine and Midwifery." "It shall be lawful for the examiners to recommend to the College that any candidate for the licence shall, for reasons to be fully stated in such case to the College, be exempted from any of the regulations hereinbefore prescribed for admission into the order of Licentiates." At this Comitia the following officers were elected for the ensuing year:—*Censors:* Dr. Copland, Dr. A. Farre, Dr. Chambers, and Dr. Monro. *Treasurer:* Dr. Alderson. *Registrar:* Dr. Pitman. At the same date the following gentlemen, having undergone the necessary examination, were duly admitted Members of the College:—Peter Wallwork Latham, M.B., Downing College, Cambridge; John Edward Morgan, M.B., 9, London-street, Norfolk-square; James Nichols, 13, Savile-row; Henry Strangways Hounsell, M.D., Torquay.

VITAL STATISTICS OF LONDON.

Week ending Saturday, June 22, 1861.

BIRTHS.

Births of Boys, 882; Girls, 867; Total, 1749.
Average of 10 corresponding weeks, 1851-60, 1632·1.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	561	516	1077
Average of the ten years 1851-60	524·8	492·3	1017·1
Average corrected to increased population ..	..	..	1119
Deaths of people above 90	..	..	..
Deaths in 15 General Hospitals	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West'.. ..	463,269	..	10	4	2	16	6	4
North ..	618,181	1	3	10	3	16	8	4
Central ..	377,794	..	4	1	1	10	4	4
East	570,898	1	4	4	2	22	4	6
South ..	772,892	..	2	5	4	15	4	8
Total.. ..	2,803,034	2	23	24	12	78	26	26

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dr. Cotton's paper on the Use of Phosphorus in Phthisis will appear next week.

We do not see that it is necessary to publish any reply from *Dr. Guy* to Dr. Turle's last note.

West Haddon.—Our list of deaths is compiled from London and Provincial newspapers, and additions are made by correspondents. It will occasionally happen that the death of an unregistered Practitioner is recorded, as it is quite impossible for a compiler to have the knowledge necessary to prevent such an occurrence.

B. R. W.—There will not be, in all probability, another Competitive Examination for Assistant-Surgeons in H. M.'s Army—in consequence of reduction of establishment. The Medical and Surgical Qualifications for the Army Medical Service are no longer required to be obtained from separate Corporations. Any one who is registered under the Medical Act as qualified to practise Medicine and Surgery, may present himself for examination, provided he is physically fit—and not under nor above twenty-six years of age.

A SURGEON?

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—The following appears as an advertisement in the *Londonderry Sentinel* of June 21:—

"To be let, a House, licensed to sell spirits, beer, tea, and tobacco, having counter and fixtures, and being newly papered, commanding the best position and the greatest thoroughfare at the waterside, together with several other very superior houses. Lime 4d per barrel under the current prices at any time. Coals, 3d per ton less, the same quality. In like manner brick, slates, salt, and Newcastle best smithy coal, all at such prices as the public may discriminate for their own advantage, having facilities not of every-day occurrence. George Duddy, Surgeon, Waterside, June, 1861."

I do not find the name in the Register. I am, &c.
Londonderry, June 22, 1861. M. D.

A QUERY.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Will any of your correspondents enlighten me concerning the following:—I have a patient, a young man, who has for a year been troubled with a most troublesome excoriation of the cuticle along the entire instep of one foot. The cuticle desquamates, leaving the under surface raw and tender and cracked. The cuticle is constantly reproduced and as constantly thrown off. There are also one or two incisive ulcers above the ankle.

The case evidently is the consequence of a varicose condition of the superficial veins, though I have never seen its effects in this situation. The treatment has comprised nearly the entire round of applications, bandaging of course being carefully attended to, but his inconvenience is in no wise remedied, except perhaps for a few days.

Elastic stockings have been made with a larger foot-piece, Startin's bandage has also been used, but all to no purpose. The best application seemed to be equal parts of milk and lime-water with tight bandaging.

I am, &c.
Bolton, June 22. MEDICUS.

COMMUNICATIONS have been received from:—

Professor SIMPSON; Dr. ROBERT LEE; Mr. LE GROS CLARK; Dr. COTTON; Mr. TEALE, Leeds; Dr. GRAILY HEWITT; Dr. MCWILLIAM; Dr. GUY; Dr. WALLER; Mr. BUTLER; Mr. COPNEY; Mr. RIVERS; Mr. VINCENT; Mr. BRIDGES, and Mr. W. COOKE.

APPOINTMENTS FOR THE WEEK.

June 29. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

July 1. Monday.

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

EPIDEMIOLOGICAL SOCIETY, 8 p.m. Dr. Smith "On the Hæmorrhagic Fever of the Peruvian Andes." Dr. Duncan "On Fever on board an Egyptian Frigate, and on shore, at Liverpool."

ROYAL INSTITUTION, 2 p.m. General Monthly Meeting.

2. Tuesday.

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

ETHNOLOGICAL SOCIETY, 8 p.m. Captain Richard Burton "Ethnological Notes on M. Du Chaillu's 'Explorations and Adventures in Equatorial Africa.'"

3. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

OBSTETRICAL SOCIETY OF LONDON, 8 p.m. Dr. R. Uvedale West "Is the Ergot of Rye, when Administered to the Mother during Labour, Dangerous to the Life of the Child? A Practical Inquiry." Dr. Tyler Smith "Four Cases of Ovariotomy."

4. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.

5. Friday.

Operations, Westminster Ophthalmic, 1½ p.m.

SAMARITAN FREE HOSPITAL LECTURES, 4 p.m. Dr. Henry G. Wright "On the Constitutional Correlations of Uterine Diseases."

EXPECTED OPERATIONS.

Westminster Hospital.—The following Operation will be performs on Tuesday next, at 2 o'clock:—

By Mr. Holthouse—Resection of Knee-joint.

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ERRATA.

Page 26, col. 2, line 7 from bottom, *for* "chlorodyne," *read* "chloroform."
Page 118, col. 2, line 12, *for* "January 26," *read* "February 2."
Page 182, col. 1, line 14, *for* "Tynes," *read* "Tyrell."
Page 384, col. 1, line 14 from bottom, *for* "A=½," *read* "A=$\frac{1}{\infty}$."
Page 423, col. 2, line 22 from bottom, *for* "ozonized," *read* "organized."
Page 555, col. 2, line 32 from bottom, *for* "funis," *read* "twins."
Page 560, col. 1, line 20, *for* "persisted," *read* "pre-existed," *ibid* line 31, *for* "vesicularization," *read* "vascularization."
Page 635, col. 2, line 29, *for* "Joshua," *read* "John."
Page 643, col. 1, line 31, *for* "Williams, S. W. D.," *read* "Bell, J. V."

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To the Medical Profeſſion of Great Britain and Ireland.

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Alſo *vol.* 1, *p.* 320.

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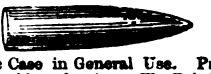

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6 oz.	,,	15s.
8 oz.	,,	18s.
½ oz. graduated in 3 doses,	,,	12s. 6d.

In quantities of not less than Six Gross, assorted to suit the convenience of the purchaser, delivered to carriers in London. No charge for Package. Breakage at risk of Purchaser.

The above Prices being based upon a calculation which excludes all *charges* whatever between the Manufacturer and the Consumer, no attention can be paid to any order not accompanied by a remittance in *full*, *made payable in London*.—P. and Co. do not supply Green Glass.—Orders and remittances to be addressed,

PELLATT & Co.,
FALCON GLASS WORKS, LONDON.

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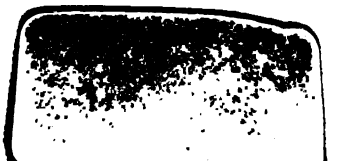

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